ASSESSMENT OF PERCEIVED COMPETENCE IN BREAKING BAD NEWS TASKS AMONG RESIDENT DOCTORS AT MOI TEACHING AND REFERRAL HOSPITAL

BY

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DECLARATION

DECLARATION BY THE STUDENT

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DEDICATION

I dedicate this thesis to my daughter Faith, for being patient with me as I did my PHD instead of playing with her. May this work inspire you to aim high in your academic endeavours.

ABSTRACT

Background: Breaking bad news refers to a medical procedure of passing unfavorable medical information to patients about their illnesses. Competence in this skill is required in medical practice and medical education curriculum was designed to equip doctors in this important issue. Globally, standardized specific guidelines in delivering bad news have been developed to assist doctors to fully disclose life threatening diagnosis, including cancer. It is against this backdrop of increasing burden of life-threatening diseases and the need for safe verbal procedures in Sub Saharan Africa that necessitated relooking at the training of breaking bad news skills among doctors.

Objectives: The objectives of this study were: to determine residents' perception of their competence in performing Breaking Bad News tasks, to determine the relationship between residents' perception of their competence and their sociodemographic characteristics, to determine the adequacy of the medical training curriculum content and methodologies utilized in training doctors in breaking bad news tasks and to determine residents perception of constraints they encounter at MTRH/MUSOM while performing breaking bad news tasks

Methods: A mixed methods approach used to collect data. Qualitative data on curriculum content methodologies and constraining factors; checklist and focus group discussions and in-depth interviews; quantitative data; perceived competence, additional training, level of training and gender in breaking bad news; surveys and causal-comparative research designs. Study population constituted postgraduate doctors from whom a sample of 80 out of 240 selected, purposeful sampling used to sample 7 residents doctors and 3 lecturers. Data was collected using questionnaires in-depth interviews and focus group discussion. Quantitative data was cleaned and entered and analyzed in SPSS version 10, descriptive statistics used to describe, and inferential statistics used in comparing data. Qualitative data was analyzed and presented thematically. A p-value of <_ 0.5 was set as significant for all tests.

Results: Competence in breaking bad news varied on three aspects: self-efficacy 134% ,however this was found to be overrated during the focus group discussion, empathy 74% of normed value, physicians beliefs scores 160% of the normed value, (N=80) 45% and 55% of the participants were female and male respectively 46% were in part 1 54% in part 2. Gender did not significantly influence competence self-efficacy t(78)=0.152 p= 0,876, empathy t(78)=0.015 p= 0.897 physician belief score t(78) =0.121 p=0.736 while level of training significantly influenced with part 2 residents being better in all aspects of competence; self-efficacy t(73)=0.427, p= 0.004., empathy t(73) 0.331 p =0.023, physician belief Score t(73) =0.213 p= 0.018**.** Curriculum structure (competence levels and helical approach) 12.5%, theoretical basis covered 42.5% task approach to training 20.2%, challenging situations addressed 36.3% and reflective approach 0% (N=80). Feeling uncomfortable, being stressed, workload and lack of formal training were identified as major constraints in breaking bad news.

Conclusions: Perceived competence varied according to the three aspects; self-efficacy was very good, less caring behaviour towards psychosocial aspects in life threatening disease care. Additional training and level of training significantly influences all aspects of competence in breaking bad news, Doctors' curriculum content and methodologies breaking bad news is inadequate, Personal and workplace factors were the main constraints identified.

Recommendations: Curriculum need structuring to include competency levels, content and methodologies in breaking bad news. Breaking bad news training should be given during the clinical years. Training in breaking bad news at postgraduate level needed. Breaking bad news teaching and clinical teaching should be consistent and complementary to reduce the constraints associated with it.

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LIST OF ABBREVIATIONS AND ACRONYMS

AAMC	Association of American Medical Colleges
ACGME	Accreditation Council for Graduate Medical Education
AD	Advance care directive e.g. do not resuscitate and no ICU etc.
ANOVA	Analysis of Variance
ASCO	American Society for Clinical Oncology
BBN	Breaking Bad News
CHS	College of Health Sciences
CIPP	Context, Input, Process, and Product (model)
DV	Dependent variables
FL	Flipped Classroom
HO	"null hypothesis" is a general statement or default position that there is no relationship between two measured phenomena, or no association among groups. In statistics, it is often denoted H0
IREC	Institutional Research and Ethics Committee
IV	Independent variable
ISE	Inner Subjective Experience
JSPE	Jefferson Scale of Physician Empathy
KMTC	Kenya Medical Training College
KNH	Kenyatta National Hospital
MANOVA	Multivariate analysis of variance, it is simply an ANOVA with several dependent variables.
MTRH	Moi Teaching and Referral Hospital

MU	Moi University
MUSOM	Moi University School of Medicine
NACOSTI	National Commission for Science, Technology & Innovation
ONCOTALK	Skills training workshop in delivering bad news
PBL	Problem Based Learning
PBS	Physician Belief Scale
PDN	Public Health, Dentistry and Nursing
SEQ	Self-Efficacy Questionnaire
SPIKES	A guideline developed by American Society of Clinical Oncology and is an acronym for Setup, patients' perception, invitation, knowledge, emotions and strategy and summary
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS AS USED IN THIS STUDY

Assessment is a wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness or educational needs of students.

Constraining factors: These are external and internal forces, organizational, personal; and otherwise, that act as an impediment to execution of BBN tasks by clinicians. This can be used interchangeably with 'constraints.'

Communication skills: The range of verbal and non-verbal competencies that health care providers utilize in caring for their patients.

Breaking bad news tasks (BBN): Is blended mix of personal attributes, practical skills, communication skills, empathy and physician belief in patient psychosocial issues that combine the breaking of bad information to patients more bearable and clearer so that patients may make informed choices.

Health care providers: This is a generic term used to describe the variety of people who provide services to health care consumers. Examples include but not limited to physicians, nurses, nutritionists, therapists, and other people trained in specific areas of health care delivery and involved directly in clinical care of patients.

Levels of training: This refers to the highest levels of training obtained by doctors. The level of training may range from degree to postgraduate levels in doctor training.

Clinician: A doctor that has been trained in use of clinical judgment to provide management to patients to have the best quality of life.

Patient: One who seeks and receives medical attention, care, or treatment from a health care provider.

Self-efficacy: a key term in social cognitive theory and has been defined as confidence or "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" What people think, believe and feel will affect how they behave. It is identified through measures of confidence or perceptions of one's abilities to perform specific tasks. In this context self-efficacy measures will be identified through statements concerning BBN tasks, where the respondents will be required to indicate the level of confidence in performing these activities.

Confidence: Confidence and self-efficacy are interrelated, however self-efficacy is domain-specific in nature or task specific in nature, while confidence is a general construct hence a personal characteristic

Perceived competence in medical procedure refers to; self-perception in ones capabilities in technical, right approaches and professionalism in doing the procedure.

Training: The process aimed at making proficient through specialized instruction and practice. Through training, knowledge, skills and attitudes are acquired over a period of time.

Training needs: The gap, perceived or real, between what is offered to doctors in terms of training in BBN related tasks and the reality of BBN related tasks expected of them during patient management as clinicians. It is identified by studying the content areas and methodologies utilized in the doctor training institutions and determining their relevance in current practice.

Empathy: communication of understanding and appreciation of the patient's feelings and predicament measured in this study by the Jefferson Scale of Physician Empathy (JSPE)

Resident: a physician who is training to be specialized in medical field which includes seeing cancer patients in that field

Oncologist: a physician who is involved in treatment of patients diagnosed with cancer.

CHAPTER ONE

1.0 INTRODUCTION

The current study was assessment of residents' perceived competence in breaking bad news task in MUSOM/MTRH by reviewing the content, training methodologies and additional skills training and constraining factors that hinder them. The study has established that residents break bad news tasks very often, has established perceived level of confidence and the effect of additional training in performing this task. This chapter has provided an introduction to the study, including the background, statement of the problem, objectives, significance and other related concepts.

1.1 Background

The goal of medical education is to produce excellent physicians who will maintain the health of their people, and this has been changing in the World over time. Current learning theory favours generalist, patient centred and problem-based approach where assessment focuses on achieving competencies in clinical, communication skills, cultural awareness and professionalism rather than reproducing packet knowledge. In order to have these, accreditation of schools is required so that safety and effectiveness of these services can be guaranteed.

Healthcare in the developing world has been modelled from the western developed countries where skilled medical practitioners are produced, and hospitals are built for their people. One such hospital is Moi Teaching and Referral Hospital (MTRH) which is the second National and Referral Hospital in Kenya and handles many illnesses. Third world

countries continue to bear the greatest burden of both diseases, severe underfunded healthcare systems and severe shortage of healthcare workers. WHO give the following statistics Americas, with 10% of the global burden and 37% of the world healthcare workers, while Africa with 24% of the global disease burden and only 3% of healthcare workers(WHO, World Health Statistics., 2006). 50% of the world's health financing is in America and less than 1% in Africa. Due to this there is exodus of skilled professionals in the midst of so much unmet health need places Africa at the epicenter of the global health workforce crisis. There is therefore severe shortage of skilled healthcare work force in Africa and success in bridging this gap will be determined in large measure by how well the workforce is developed for effective health systems.

As if that is not enough, life-threatening diseases have been increasing making these situations of breaking bad news common in hospitals like MTRH, either seeking help and or diagnosis. While dealing with such patients by healthcare personnel, breaking bad news, is inevitable in order to effectively plan for their treatments. Clinicians and rightly so, acknowledge that patients have a right to information regarding their life-threatening illness. The World Health Organization (WHO, World Health Statistics., 2006) defines health as a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity. Health is perceived by the patient and ill health is as a result of genetic, environmental and other factors. (Dunn, 1959) has explained that illness is an experience that exists when there is disturbances or failure of psychosocial development leading to changes that traverse all dimensions of the human being namely; biological, physical, mental and psychosocial (Dunn, 1959). Breaking bad news to patients in a careless manner constitutes harm by the medical professional hence breaking bad news

well is an essential skill for all doctors, as it is something they will do hundreds if not thousands of times in their professional careers. Breaking bad news is a skill just like physical examination and surgical however it can only be effectively done when both the cognitive and affective domain are combined.

The needs of patients regarding their illness and communicating the same has been area of interest in research, however, this research has been mainly in the developed world. Empirical research show that patients want to be informed about their life-threatening illness (Engel, 1990)(Nadelson, 1993). Historically, however, breaking bad news communication has been given scant attention in medical training (Schildmann, 2005) (Schmid, 2005).

Breaking bad news tasks is not one set of skills to be used in a specific situation. It is blended mix of personal attributes which include empathy, practical communication skills and behaviors that combine the breaking of bad information to patients more bearable and clearer so that patients may make informed choices (Baile W. F., 2000). For the clinician, BBN communication difficulties lead to worse job satisfaction and higher stress levels, as well as being associated with high proportion of errors and complaints. Studies suggest that a number of factors, aside from deficient knowledge, can affect a doctor's ability to impart bad news sensitively, including burnout and fatigue, personal difficulties, behavioral beliefs and subjective attitudes, such as a personal fear of death (Brown R. D., 2009)

Most clinicians have not received formal training in breaking bad news except that given during their undergraduate training which is given in their first and second year of training and is doubtful if it can support this frequent and difficult task (Simpson, 1991). Some of

the problems related to cancer are not solvable but ability to share their feelings has been shown to help (Maguire P. , 1999). Studies show that key communication skills elements in breaking bad news have been identified (Engel, 1990) (Nadelson, 1993). This communication can only exist if the physician can comprehend the patient's cognitive and affective states (Hojat M. S., 1995) The physician should therefore have empathy and right belief towards the patients' psychosocial issues. Building on previous research empathy is the critical attribute required to precipitate a therapeutic mutual understanding between physician and patient. Effective breaking of bad news cannot take place without empathy. However, it appears that health professionals in cancer care often demonstrate a lack the skills that would facilitate patients' disclosure of the psychosocial aspects of their illness (Kurtz, 2005) (Takayama, 2001) (Weeks, 1998). Research indicates, however, that these skills can be taught learned using conventional and experimental methods (Spiro H. , 1992) (Spiro H. M., 1996). A met analysis of communication skills training by Barth et al showed mild to moderate improvement and according to the authors, this low to moderate effect on the performance could be explained by a "ceiling effect" since participants had a prior high level of communication competence in BBN. (Barth, 2011)They recommend that primary studies be encouraged to provide results for less experienced professionals. Another meta-analysis by Nicole, C. et al. noted that almost all the studies on this topic are from USA and the remainder of about 11% were from South America. Studies in training in BBN outside those countries therefore is encouraged to not only find the status of residents but how effective recommended training program are (Nicole, 2019).

The senate approved MBCHB and Kenya medical practitioners and dentists' council core curriculum was designed to address this issue of breaking bad news in the undergraduate

medical training. The course of basic communication skills and more advanced communication skills including sensitive communication and breaking bad news is covered in the curriculum and is mandatory and must be passed successfully to proceed in medical training. This is part of a comprehensive effort to provide training in communication skills, including breaking bad news, as part of the core curriculum in medical schools and emphasize the effective communication as a core competence. This training is also provided to doctors in their practice through continuing medical education and other postgraduate programs. Doctors' professional competence in any skill, including breaking bad news tasks, is a continuum that comprises dispositions such as cognitions and affect-motivations as well as situation-specific skills and performance. In this study, corresponding to the different aspects of teaching competence, different forms of assessment will be beneficial when it comes to assessing the outcomes of resident doctors learning processes. In general, two different approaches to assessment can be distinguished: Summative assessment (SA) measures the achievement of previously defined standards, tasks or goals, encapsulating all collected evidence up to a given point to yield either comparative or numerical ratings (Taras 2005). Formative assessment (FA), on the other hand, promotes individual development by interpreting and providing feedback according to a diagnostic judgment that presents information about the candidates' continuative learning processes. Unfortunately, many see the distinct purposes of these two forms of assessment as incompatible (William 2010). But in our understanding of SA and FA, these two approaches can be combined and even be integrated to assess the development of proficiency inbreaking bad news, because each assesses different aspects of competence. While SA considers dispositional aspects of competence (e.g., knowledge

about study content and the prevalence of perceived opportunities to learn about different study content), FA focuses in on the contextual situatedness of the doctors' professional actions and the development of situation-specific skills. When evaluating doctor education measures and the outcomes of learning, SA generally must play a role, since any educator assessment aims at least to certify that certain course planning and teaching skills have been acquired. During residents training however additional training to provide opportunities for cognitive learning as well as for the acquisition of situation-specific skills, just like what is done during internship. In this study, therefore, SA covered doctors' cognitive knowledge dispositions and the theoretical learning opportunities provided by during their training in medical schools. On the other hand, FA is often brought into play as a pragmatic option for the support of residents in their practice. To concretize this in this study, a FA will yield information about residents practical learning opportunities during his or her training—in particular, the individual's acquisition of situation-specific skills in our case breaking bad news tasks. Further, the FA will provide information about our resident's personal experiences with practical teaching, which we then might use, either to provide feedback, or adaptively for future training planning.

There are no guidelines to the best of our knowledge, available for breaking abrupt death news (Kihara, 2013). The WHO estimates that by 2010, (WHO, Cancer in Developing countries, 2016) cancer will be the leading cause of death in the world. In 2008, approximately 72% of cancer deaths occurred in low and middle-income countries. Residents in various training programs in their four-year training program in Moi University are involved in breaking bad news to patients. The elements required in breaking bad news have been identified and there are published guidelines in delivering

bad news however the form and format in training residents in same in sub-Saharan Africa has not been documented.

Though breaking bad news to someone is never a pleasant task doing it at the wrong time or in the wrong way can be even worse. As alluded to above research shows that many physicians do not meet the expectations of patients with eventually fatal diseases and medical students do not feel confident to attend to the psychosocial needs of dying patients. The literature also talks about the need for evidence-based education or training to nurture competence. There is also needed to have a standardized guideline so that doctors in all parts of the world can be compared and this has led to development of specific guidelines in breaking bad news, the utility of such a guideline has not be documented, hence the need to give additional training in breaking bad news. Until recently, it was customary to speak about a physician's capacity for clinical communication as his or her “bedside manner,” assumed to be largely mirroring his or her personal qualities and not something that could be taught. The status of perceived competence in breaking bad news in health care systems, including residents, in the Kenya is largely unknown.

The technological progress has allowed patients in all walks of life to access information either directly or indirectly which the doctor would otherwise have concealed. Studies show that doctors may be hiding some information from them. (Lisa, 2012)

Since elements of breaking bad news have been identified, guidelines have been published, as a medical educator the researcher, using innovating teaching methods, wanted to assess the perceived competence in BBN tasks, effectiveness of additional training of residents in breaking bad news and find out constraining factors. May be several factors play a role in

doctors being viewed as not communicating well to patients however as medical educator the first place I would look at is training if my product is accused of being incompetent. If I am to address the issue of training for any reason, the closest and most recent physician are resident doctors and therefore my study focused on doctors on training in order to understand where this issue of poor communication of bad news is coming from.

Residents have tight schedules in their curriculum and any training planned would be difficult to fit in their tight daily schedules. Experts in breaking bad news are mainly in behavioral science department and may not be easily available to get adequate time to teach residents using the traditional teaching methods. Research evidence however suggests that training programs contribute in great measure towards competence in breaking bad news. It is hoped that the findings of this study will shed light on what is "ailing" doctors in breaking bad news communication and improve patient satisfaction and ultimately improved health of patients with life threatening illnesses.

Clinicians are confronted with this difficult task early in their carriers and studies show that they do not feel sufficiently prepared for these tasks and this informed the choice of residents in this study (Chris, 1994) (Lu, 1995). Advanced care directives like do not resuscitate in terminal cancer patient remain minimal in our African population leading to many admissions to ICU and very high cost of care. A study by Omondi et al. in Aga Khan showed advanced directive uptake of 41% of the patients, however "pertinent point is that the hospital is patronized by well-educated and high-class clients irrespective of ethnicity" (Stephen, 2017) 41% had only 20% African population. This physician-patient communication has become important to the point that American Academy for Physician

and Patient interaction held a conference on the 7th April 2002 in Fetzer Institute Kalamazoo Michigan (Duffy, 2004) referred to as Kalamazoo I where emphasis was on importance of physician patient interactions and was followed by another conference Kalamazoo II where there was an emphasis on physician's interpersonal skills, empathy and attending skills. There are a few established recommendations for the delivery of bad news in the United States (Baile W. F., 2000), Australia (Girgis, 1997). SPIKES protocols which will be used in this study is based more on expert opinion, but less on empirical evidence. No recommendations for delivery of bad news are available in Kenya though training in communication skills is an important part of the curriculum.

However recently from the 1990s, conferences and intense literature reviews have yielded guidelines in breaking bad news training. This culminated in the signing of international consensus statement in Amsterdam in 1998 (Makoul G. S., 1999). Among the recommendations was the development of a coherent framework of teaching and assessment of communication including BBN which was done in North America, Canada and the United Kingdom (Makoul G. , Essential elements of communication in medical encounters: The Kalamazoo consensus statement., 2001) (Simpson, 1991). This led to improvement of this type of communication in the western countries however poor communication, particularly Asia and third World countries including Africa continued. Reviewing the globalization; Schwarz envisioned a global physician who would have universal competencies. This competencies were given to International Medical Education to develop and among them communication skills including BBN (SCHWARZ, M.R) These competencies were incorporated into the curricular in all medical universities in the developing world including Moi University and the older Universities like University of

Nairobi, University of Makerere in Uganda and Ibadan in Nigeria. Surveys done as late as 2020 showed that African countries remain behind in this important skill however the Asian countries had achieved competence. Despite evidence-based training and inclusion in curricular, competence in these skills remains low and poor performance in BBN especially with cancer patients, has been shown to be associated with worse clinical and psychosocial outcomes, including worse pain control, worse adherence to treatment, and confusion over prognosis and dissatisfaction at not being involved in decision making (Hanratty, 2012). In other words, harm to patients which is against the norms of medical practice. The current study was done therefore to shed some light into why doctors continue to lack competence in this important skill when evidence-based content, training methodologies have been included in the curricular.

1.2 Statement of the problem

Despite remarkable progress evidence-based content and training methodology in various medical curricular doctors continue to perform dismally in BBN. This is supported by:

Personal experience as a pathologist; having seen first-hand the anguish and torment of patients after receiving unfavourable medical information, Studies in KNH by Kihara noted that no guidelines in Kenya in BBN (Kihara 2013), Globally 33.4% of HC workers formal training -someone else per continent: Africa p=0.44/0.04, Europe p=0.03/0.30, Asia, p=0.07/0.05 and North America p=0.09/04 (Abbas et al. 2020)

The problem has even been noticed by hospice and palliative care HC workers

Kenya hospices and palliative care association (KEHPCA) is training doctors in BBN. https://kehpca.org/ Emergency care foundation offering training in BBN; **https://www.emergencymedicinekenya.org/how-to-break-bad-news-remember-spikes/** This has raised concerns by the public and allied medical people who have complained, and one made a comment that "lack of training of doctors explains why an alarming number of patients and family members are not contented with the manner in which information is delivered to them, especially bad news". With that in mind, Kenya Hospices and Palliative Care Association (KEHPCA) officials have decided not to sit and watch as that trend deteriorates further and have gone round training those working in hospitals in breaking bad news communication. Emergency care foundation which is registered in Kenya and non-profit organization offers training in breaking bad news to doctors working in hospital taking cognizant to the feeling that doctors are not trained. People wailing in mortuaries due to loss of a loved one "suddenly" with cancer!

Intensive Care Unit (ICU) for more than a week and they knew he was dying of cancer. Inquiring further the patient and the close relatives had not been told about the prognosis and they push for the patient to be taken to ICU in the hope that he will recover and end selling all the family property he had to settle the ICU bills leaving his dependents in severe poverty as the hospitals rich. The majority of cases are associated with inadequate information and miscommunication relating to the expected outcomes, examples include by-pass surgery in cancer of head of pancreas, the patient feels relived of the itching and ability to eat and think they are healed, when they die the relative want a post-mortem to find out why he died! Many during the autopsy feel so terrible and even ready to sue the hospital and the doctor. Cancer management in the hospital Oncology clinic start with

diagnosis of cancer. So, there is a problem, and this is in breaking bad news to patients. This problem affects most clinicians who have been trained in our university's medical education from the medical officers to established consultants. The current study is therefore to try and fill the gap of why doctors whose curriculum has the content and methodology to make them competent continue to perform dismally in this important task; BBN.

1.3 Purpose of the study

To assess resident doctors perceived competence in breaking bad news tasks at Moi Teaching and Referral Hospital (MTRH)/ Moi University School of medicine (MUSOM)

1.4. Study Objectives

1. To determine residents' perception of their competence in performing Breaking Bad News tasks
2. To determine the relationship between residents' perception of their competence and their sociodemographic characteristics
3. To determine the adequacy of the medical training curriculum content and methodologies utilized in training doctors in breaking bad news tasks
4. To determine residents' perception of constraints they encounter at MTRH/MUSOM while performing breaking bad news tasks

1.5. Research Questions and Hypotheses

- Do residents' doctors perceive themselves to be competent in breaking bad news tasks?
- Is the content and training methodology utilized in training doctors in BBN tasks adequate to make them competent?
- What are the main constraints affecting competence in BBN?

1.6 Alternative hypothesis; HO1:

There is no statistically significant difference between competence and sociodemographic characteristics of residents.

1.7 Research variables

A variable is any trait or characteristic in research that varies (Eaves, 2010). The independent variables defined by (Gurmu, 2011) as those attributes which are thought to influence the dependent variable. In this study they include: training of doctors, constraining factors, were the presumed causes that could be attributed to the presumed effect perceived competence in breaking bad news tasks, which is the dependent variable in this study. Self-efficacy in performing BBN task is considered to be dependent variable however since it is not measuring directly it can also be seen to influence the actual performance of BBN tasks; hence in this study it is seen as both independent and dependent variable. Dependent variables: (a) observed measures of BBN competence (self-efficacy; empathy, and physician belief scale). Independent variables: participation in a training

program for residents in BBN tasks, constraining factors in BBN tasks and self-efficacy in BBN tasks.

1.8 Justification for the study

The rationale for this study was: There is a public outcry relating to breaking bad news tasks by doctors and though this was of concern in developed countries remedial measures led to its inclusion of breaking bad news training in residency training, however competency in BBN is not mandatory in the developing world like Kenya. Most studies on the effectiveness of any training program has been done in the western developed countries and status of competence of residents in this important task is largely unknown. Most studies done in Africa are mainly surveys and though this gives good information, the fact that there is still a problem begs the question; why?

Patient safety: Verbal procedures must not only be effective but safe and hence the importance of competence in verbal procedures set out in various curricular world-wide (Iobst, 2010). Studies show patients harmed during transitions due to inadequate communication(Horwitz, 2008)(Kitch, 2008) Unnecessary tests, procedures and even admission has been showed to be due to poor history taking skills (Hasnain, 2001).

Evaluation of medical education training in third world countries are rare and this has hindered the improvement of such training with the aim of producing safe and effective doctors. (Rappaport W, 1993)

The issues relating to BBN tasks are many and varied, social, cultural and personal factors may play a big role however perusal of surveys done in Kenya and Africa on BBN highlight training as the main constraint.

1.9 Significance of the study

This study sought to investigate how effective a training program in BBN tasks for doctors working in MTRH/MU. Additionally, the results of this study will shed light on why it remains difficult for residents to break bad news. The results of this study will be expected to be of both theoretical and practical significance. Once disseminated, the findings will be useful for the various stakeholders:

Medical education curriculum developers and planners who will find insight into the content, mode and structure of training that is effective in furnishing the clinicians with the necessary skills in BBN tasks.

Medical education implementation committees who will find this information new knowledge on relevant areas of emphasis in training clinicians, translating into a competent clinician with better patient and doctor satisfaction.

The constraining factors in BBN tasks will lead to recommendations to the workplaces and supervisors, which will improve patient care leading to better health care and may be useful for the management in MTRH to improve the working place of resident's doctors.

This study deals with health care and a different field of BBN, which is a special form of communication skills. These are symbiotic fields where both are required by clinicians in

their daily duties, it is hoped that other related fields like counseling will be improved. It is hoped the findings of this study will go a long way in fitting into the theoretical basis of patient centered clinical care.

1.10 Scope of the study

This study was conducted in Moi Teaching and Referral Hospital in Eldoret Uasin Gishu County. Residents working in MTRH and student MUSOM were included to provide information on various aspect of competence as self-efficacy, physicians empathy and physicians beliefs about psychosocial aspects of the patient care and constraining factors. The residents were also key informers on the perception of adequacy of the curriculum in BBN. Curricular used to train doctors in BBN the core curriculum by the Medical Practitioners and Dentists council and Moi University Senate approved MBCH. Lecturers teaching communication skills and BBN were the key informers on the adequacy of content and methodologies, in performance of BBN tasks, constraining factors.

1.11 Limitations of the study

Population issues: An important limitation of this study was the small sample size (80 physicians) which was necessary for an in-depth study. The small sample makes the assumptions of this study tentative for the reader.

Subjective self-reported Questionnaires: Another limitation of this study was the fact that evaluation of training outcome relied completely on subjective responses.

Research design issues: A methodological weakness of the physician self-ratings is the sensitivity for response bias. This was particularly important as residents from 5 departments out of 8 were either taught or to be taught and examined by the researcher. Self-ratings are generally reactive measures; the measurement itself may influence the outcome, since the physicians are not blind to their training condition (Cook, 2002). Post-training improvements on self-ratings may not only be the result of a training effect but may also reflect the unwillingness of the respondents to show that the training efforts have been useless particularly in my case.

1.12 Assumptions of the study

At the heart of the researcher's approach to breaking bad news skills training are five important underlying assumptions and perspectives adapted from (Kurtz, 2005)

a. Delivering bad news is an intermediate to complex communication skill.
b. Communication in medicine is a series of learned skills rather than a personality trait; anyone can learn to communicate effectively.
c. Effective communication ensures an interaction rather than a direct transmission of information process.
d. Experience can be a poor teacher of communication skills.
e. Certain elements of learning are essential to obtain change: Systemic delineation and definition of skills, Active small groups or one-to-one learning, Observation of learners, Well-intentioned, detailed, and descriptive feedback, repeated practice, and rehearsal of skills (Kurtz, 2005).

1.13 Theoretical framework

The assessment of breaking bad news tasks is actually an evaluation and hence input process outcome and output model (Bushnell, 1990) was utilized. However, in assessment there is formative and summative assessment and the two can be combined by creating an additional training given to residents so that breaking bad news can be looked from two perspectives summative (evaluation of the content and methodologies used) and formative (the effectiveness of a training program for residents in breaking bad news tasks)

For the formative assessment of breaking bad news specific training program developed by Baile et al. was utilized. The crafters of the oncology training program for oncologists which we will model our study, the creators of SPIKES (Baile W. F., 1999) procedure extrapolated from both medical and educational theory. They specifically referenced the theoretical constructs of adult learning theory and social learning theory(Bandura, Socail learning theory, 1977)(Knowles, 1990).

1.14 Research Philosophical Approach

Researchers have asserted that philosophical orientation or paradigm ought to form the main part of the research design (Creswell, 2007). A paradigm is a set of assumptions, concepts, values, and practices that constitutes a way of viewing reality. Although the three main sciences accept this basic notion of what constitutes a paradigm, the actual paradigm embraced by each science is often different. Two of the main paradigms in medical education is positivist paradigm and the naturalistic paradigm. Positivist paradigm which was authored by Descartes in 1637 posits that there is an objective reality that is directly

observable, and this can be measured using mathematical models that can predict future events. Positivists believe that objective collection of data and its analysis must be independent of the opinions of the researcher. Post-positivist researchers on the other hand begin with a theory, to explain the phenomenon, then collect data in order to either support or refute the theory, and then make necessary changes and collect further data to check on whether the theory is supported or refuted. Thus, the assumptions of post-positivist mostly support quantitative inquiry approaches rather than qualitative inquiry approaches. The natural sciences tend to use the positivistic paradigm and the human and social sciences tend to use the post-positivistic paradigm.

This study adopted Pragmatism paradigm which is not committed to any one system of philosophy or reality. Pragmatist researchers focus on the 'what' and 'how' of the research problem (Creswell, 2007). Early pragmatists "rejected the scientific notion that social inquiry was able to access the 'truth' about the real world solely by virtue of a single scientific method" (Mertens, 2014). While pragmatism is seen as the paradigm that provides the underlying philosophical framework for mixed-methods research some mixed-methods researchers align themselves philosophically with the transformative paradigm. It may be said, however, that mixed methods could be used with any paradigm. The pragmatic paradigm places "the research problem" as central and applies all approaches to understanding the problem (Creswell, 2003, p.11). With the research question 'central', data collection and analysis methods are chosen as those most likely to provide insights into the question with no philosophical loyalty to any alternative paradigm.

Positivists believe that reality is objective and independent of the researcher's interest in it. It is measurable and can be broken into variables. Post-positivists concur that reality does exist but maintain that it can be known only imperfectly because of the researcher's human limitations (known as critical realism). The researcher can discover reality within a certain realm of probability (Mertens, 2014). Post-positivists, however, modified the belief that the researcher and the subject of study were independent by recognizing that the theories, hypothesis and background knowledge held by the investigator can strongly influence what is observed, how it is observed and the outcome of what is observed.

Pragmatist philosophy holds that human actions can never be separated from the past experiences and from the beliefs that have originated from those experiences. Human thoughts are thus intrinsically linked to action. First, "actions cannot be separated from the situations and contexts in which they occur" Second, "actions are linked to consequences in ways that are open to change" that means it is not possible to experience exactly the same situation twice hence then findings are provisional. Finally, "actions depend on worldviews that are socially shared sets of beliefs" (p. 27). Pragmatists believe that no two people have exactly identical experiences, so their worldviews can also not be identical. This is crucial in the current study where evaluation of the teaching and assessment of a specific aspect of communication skills in the following ways:

A. The views of residents about their training reflects the actual teaching and assessment of that aspect of communication skills
B. The assessment of the self-efficacy in BBN reflects the potential of the actual performance in BBN.

C. Finally perceived competence is the actual measure of both the actions and beliefs of residents following the training in BBN, and this will be useful in the objective of the current study

1.15 Operational definitions of terms

Breaking bad news (BBN): is a medical interview whose purpose is to pass unfavorable medical information to a patient: diagnosis of cancer, transition to palliative care and death were the main bad news in this study.

Assessment: is a wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness or educational needs of students.

Communication skills (CS); a fundamental clinical skill to establish a relationship with the patient, paving a way to successful diagnosis and treatment.

Perceived competence in medical procedure refers to; self-perception in one's capabilities in technical, right approaches and professionalism in doing the procedure.

Tasks: are specific elements within a medical interview e.g., giving bad news, building a relationship, catering information and eliciting patients world view.

Level of Training: This refers to the highest levels of training in medicine obtained by the resident. Level of training could range from basic MBCHB to sub specialization in Master of Medicine (MMED) or postgraduate Diploma in a specific area like Forensic medicine etc.

Doctor: A person trained in diagnosis and management of diseases in order that patient improve, recover or to achieve the best possible quality of life.

Resident doctor: A doctor who is training for a specific specialty in medical practice examples are: gynecologists, pediatricians etc.

Training: The process aimed at making proficient through specialized instruction and practice. Through training knowledge, skills and attitudes are acquired over a period of time.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews empirical and theoretical literature that are related to the objectives of the study, residents' perception of their competence, various determinants of competence like gender, training, experience and medical specialty in essence sociodemographic characteristics, curriculum content and methodologies utilized in training and constraints in breaking bad news tasks. However as indicated in chapter 1, the greatest threat to physician-patient interaction/relationship is BBN. Physician/patient relationship will be highlighted and the relation with BBN before reviewing literature relating to the training and assessment of competence in BBN. The assessment of BBN skills will be discussed in detail. Finally, the constraining factors experienced by clinicians in the performing BBN will be reviewed from a variety of sources. It is not complete without mentioning the hidden effects of culture on perceived competence in BBN. The chapter ends with a conception framework adopted for this study

2.2 Physician-patient relationship

Effective physician-Patient communication should lead to strong relationship between the doctor and the patient. This has been shown to be associated with patient safety and treatment efficiency (Herman, 2001) (Meyer, 2002) (Scalise, 2006) (Kampmann, 2006) (Kripalani, 2007) (Krug, 2008) which in turn lead to opening up of the patients, promotes compliance and prevents miscommunication (Maguire P., 1999). Research shows two primary models, paternalistic and patient centered (Roter, 1987). Patient centered model

leads to better patient psychosocial and emotional states and patient satisfaction that their problems are being addressed. Paternalistic physician-patient relationship still prevails in many settings (Duffy, 2004). Research shows that physicians are engaged in physician dominant relationships with little or no say by the patient (Kurtz, 2005). Research also shows that doctors are focused on diagnosing the problem and emotional concerns of the patients have not been emphasized (Roter, 1987). Hall Roter and Kutz have shown that patient contentment is intricately related to physicians' attitude. Research also shows that doctors who have relationship centered practice enjoy their practice and less legal challenges. Professional bodies have been pushing for better interpersonal, communication skills in residency programs (Duffy, 2004).

Physician patient relationship is determined to a large extent in the cultural beliefs of both the patient and the doctor, whereas the doctor may have learnt medicine based on the western patient autonomy, the patient may have a different meaning in his or her autonomy. A study on the challenge of truth telling across cultures concluded that a new perspective on the principle of autonomy is needed (Farzaneh, 2011). For the doctor to respect a patient autonomy means different things to different people according to their ideas and beliefs. It is therefore clear that physicians should certainly have and use excellent skills cognizant this cultural diversity and make decisions based on patients' values and preferences. Training is needed to develop better skills in handling these difficult conversations, however skill sets available are based patient autonomy which has not factored the various cultural differences.

In Africa, as alluded earlier, individual autonomy is non-existent and the decisive role played by the community (Mbiti, 1969). The cardinal point in the understanding of the African view of person is summarized as: “I am, because we are, and since we are, therefore I am.” (Bujo, 2001), Other studies suggest that, to some extent, an obligation by healthcare personnel to protect patients from bad news like cancer; because of its stigma, it considered cruel to break bad news to them. The authors in one study in Turkey concluded that the distress to the patient was due to the way in which the information was delivered where incomplete information and misrepresentation of the illness rather than the disclosure itself (Ateşci, 2003). and misrepresentations of the illness rather than disclosure itself (Bozo, 2010).

It is evident form the foregoing that in sub-Saharan Africa, there is a dilemma in relation to breaking bad news tasks, whereas we have tools to deliver the news, the doctors’ own beliefs, cultural context and that of the patient determine how these tools are utilized. It is imperative that studies need to be done to look at the impact of these cultural beliefs have on the meaning of patient autonomy in the African setup, the effect of globalization and technological advancement in the African humanism and finally the effectiveness of the guidelines, developed based on western patient autonomy, in delivery of bad news.

Interpersonal and communication skills should be taught with the same rigor as other medical technical skills like patient examination. Most physician have not received basic training in interviewing, psychological assessment, and counselling. The only psychological training they have is that of patient care which works in clinical setting but ineffective in cancer setting (Maguire P., 1999). Training in cancer setting should focus on

physician knowledge, skills, and attitudes. The basic knowledge in interpersonal and communication principles provides learners with a framework and terms for developing necessary cancer care communication skills. Incorporating attitudes and beliefs into the training provides the opportunity to explore participants' anxieties, their awareness of feelings, and thoughts about their patients. Attitudes and belief aspects of training address the need to treat patients as human beings rather than as medical cases. Skills training emphasizes the improvement of performance in communication skills (Baile et al., 1999; 2000). This training attempts to support participants in learning how to incorporate new behaviors into their clinical practice. Communication Skills Specific for Oncology

Guidelines have been developed to guide physicians in being able to help patients and understand their concerns. A meta-analysis that reviewed 302 studies from 1973 to 1993 about delivering unpleasant news indicated that there are many important factors that need to be considered when a patient is informed about his or her unfavorable condition (Creagan E., 1994). The review of these studies found that, in general, physicians were encouraged to provide a private environment for the patient, explore the patient's feelings, and converse in simple language. The literature reviews also emphasized the importance of providing the opportunities for the patient and the family to ask questions, makes clarifications, and offer different treatment options. Back and colleagues (Back A. L.-E., 2003) indicated that only 5% of oncologists who are actively practicing medicine have been presented with the opportunity of participating in an educational program that emphasizes "giving bad news" (Back A. L.-E., 2003). Research shows that doctors are not skilled in giving unpleasant news to their patients and are weak in dealing with the aftermath of having related bad news (Elwyn, 2001) (Ptacek, 1999).

2.3 Conceptualizing breaking bad news tasks.

In the medical context, bad news are ‘any news that drastically and negatively alters the patient’s view of her or his future’ (Buckman, Breaking Bad news: why is it still difficult?, 1984). Bad news means a kind of information that starts a new life era for the patient. (Fallowfield L. L., 1998) (Baile W. F., 1999). Bad news is by nature, hard to tell and hard to hear and people who have looked from a philosophical perspective described them as words that makes someone’s “dreams shatter and fall to the ground”. It can be that of AIDS, cancer, amputation of a limb and brain degenerative disease.

Medical professionals including resident doctors and other healthcare workers face this task on a daily basis, but this does not mean they know how to handle it. Breaking bad news confronts feelings from both sides of the communication, the patient, or the family on one hand and the doctor on the other hand. Both face this from different perspectives, for the patient he has to deal with sadness and despair of the information while the doctor deals with his or her self-confidence in being able to deal with their own feelings as well as with the listener’s reaction. Many doctors see losing a patient as a failure. Research indicate that doctors have difficulties in the task of delivering bad news or even communicating with the family (Eggly, 1997) (Tang, 2018) The process of ‘how to’ is still a big struggle and some experience fear and anxiety with measurable physical effects like increase heart rate. Many doctors are incapable of showing their own emotions or expressing empathy and this is modelled by their students (Tang, 2018). Many students complain of lack of a role model in breaking bad news communication (Afghani, 2018). Many research show that students are willing to learn and that educational resources are

well received (Afghani, 2018) (Supe, 2011). Many patients and family members are not contented with the way information is delivered to them, especially bad news, with that in mind, Kenya Hospices and Palliative care Health care workers (Association, 2019) officials have decided not to sit and watch as that trend deteriorates but have embarked on campaign to train doctors in breaking bad news and emergency foundation in Kenya has posted in their website a free training program for doctors after noticing the problems in communicating bad news.

Benefits of competence in communication of breaking bad news has been documented in literature; patient satisfaction, medication compliance, and appointment keeping(Atasoy, 2012). At the same time, clear communication provides the clinician with better information needed for accurate diagnosis and appropriate treatment planning(Fallowfield L. L., 1998)(Roter, 1987).

Another big complication in this type of communication is the notion that communication is an individual expression of culture and social patterns(Mostafazadeh-Bora, 2017) , this means it may be different in every culture and the effects may or may not be the same. Locally no studies have been done looking at the impact of competence in BBN, however the negative aspects of incompetence has been reported as case reports. One such case was reported by Kihara ((Kihara, 2013) where she reported the difficulties in handling a maternal death in labor ward. She highlighted the lack of guidelines in BBN. This is despite having the contents and methodologies in teaching and assessment in this important skill has been included in the medical curricular worldwide.

The concept of bad news can therefore be viewed from several standpoints discussed in literature. The first view point which applies to most of the literature already discussed, is objective bad news. This refers to communication information to the patient of a potentially fatal, described by Australian Palliative care as 'life-limiting, progressive, and advancing, referred to as "eventually fatal health conditions," (Lawrence, 2013) This includes cancer, HIV AIDS, death of a loved one and other potentially fatal diseases. Another view is in terms of the prospects of the future, this was proposed by Buckman in 1992 and is closely related to the one above and the conditions are similar while another view is psychological effects as: 'cognitive, behavioral or emotional deficit in the person receiving the bad news which lasts beyond the bad news encounter' Ptacek, 1999. Of importance is that in all these viewpoints, BBN is seldom singular as several disturbing event keep coming up which fit the definition of bad news. This study will focus on objective bad news as these will be easier to describe.

2.4 Development of perceived competence in BBN

Perceived competence in medical procedure refers to; self-perception in ones capabilities in technical, right approaches and professionalism in doing the procedure. It is important to note from the word go, that competence in any medical procedure has three aspects unlike in other tasks, this include the technical knowledge of the procedure usually taught in medical schools as biomedical information, correct attitudes which are based on the four pillars of medical practice and finally professionalism.

BBN is as defined in this study is a form of communication skills, however due to the seriousness of the matter and the effects on the patients it requires special and specific skills

to perform. This makes it different and will be addressed differently from the rest of the communications skills highlighting the difference. From the time Buckman remarked ‘simply that talking to seriously ill patients need greater emphasis in the curriculum’ several studies have been done which show lack confidence and skill in this basic task; (Buckman 1992, Ptacek, 1999 , Girgis, 1997, Maguire G. 1993, Fallowfield L. 1996). This lead to extensive literature reviews which generated evidenced based guidelines for practice (Girgis, 1997, Fallowfield L. 2004, Buckman 1992, Harden, 1996, Makoul G, 1999, Kurtz S. S., 2003.) These guidelines were later developed into consensus statement that was signed in 1998 in Amsterdam dubbed International consensus statement on teaching and assessment of communication skills including (Makoul G, 1999) Following the signing of these consensus statements, regions developed coherent frameworks for teaching and assessment of communication skills including BBN. (North America, UK and Canada resulting in inclusion these guidelines graduate and postgraduate medical curriculum (Makoul G, 1999, Silverman et al 2008, Simpson M. et al 1991). Reviewing the globalization; Schwarz noted that the Sub-Saharan Africa and Asian countries were lacking behind and he envisioned a global physician who would have universal competencies. IIME then developed these; competencies global competencies. Which have seen been implemented in most medical school curricular. Despite the inclusion of these evidence-based protocols in training doctors in BBN, lack of competence in this basic task is evident among most clinicians.

The body of knowledge and evidence for these content has been documented in literature (Stewart M, 1999) (Silverman, 2005) (Makoul G, 1999) (Martin, 2008) which form the basis of content for the attainment of both technical, attitudes and practice in breaking bad

news. Many medical educations curricular in recognition of this have developed breaking bad news communication skills course in their programs (Garg, 1997) (Cushing, 1995). Some studies on house officers perceive themselves to be inadequately trained (Makoul G., Essential elements of communication in medical encounters: The Kalamazoo consensus statement., 2001)

The current consensus statements in content, teaching methodologies and curriculum structure in communication skills teaching including breaking bad news tasks. In the United Kingdom, 33 medical schools met to design and suggest the implementation of a consensus curriculum content in communication skills (Martin, 2008) 'The teaching and assessment of clinical communication have become central components of undergraduate medical education in the UK. This paper recommends the key content for an undergraduate communication curriculum. Designed by UK educationalists with UK schools in mind, the recommendations are equally applicable to communication curricula throughout the world'. This review and consensus arose a s result of a previous international consensus meeting where 8 statements were made in the Netherlands.

From 1990s, there has been acceptance for the need to teach and assess communication skills. Faculty meeting at a consensus workshop during the International Conference on Teaching Communication in Medicine (Oxford, July 1996) generated a series of recommendations (Makoul G. S., 1999) International consensus statement was ratified in Communication in Health Care Conference organized by NIVEL, the Netherlands Institute of Primary Health Care (Amsterdam, June 1998) for undergraduate, postgraduate, and continuous medical education. As a results of these statements, countries and continents

had meetings to come up with consensus for their region in relationship to teaching and assessment of communication skills including breaking bad news task. All these consensus statements agreed as they were based on same sound theoretical and body of research evidence, and this form the first requirement in teaching and assessment of communication skills.

The GMC in the UK, the Canadian consensus statement, American consensus statement dine Bayer–Fetzer Conference dubbed 'The Kalamazoo Consensus Statement' Following the Kalamazoo I Consensus Statement, which came up with seven essential sets of communication tasks which are relevant to physician patient communication i.e. students should learn to build the doctor-patient relationship, open the discussion, gather information, understand the patient's perspective, share information, reach agreement on problems and plans and provide closure. Buckman et al. indicated that "In general, however, the more attention that can be given to each of these points the better the eventual performance is likely to be. Above all it is necessary to plan as carefully as possible and to respect the people to whom the information is being given by listening and watching them at all stages and being responsive to their wishes and reactions, which will be diverse. It is important to realize that the environment and healthcare professionals' behavior will have a profound influence upon the patient and family in all respects" The development of the consensus statements was based on a previous signed international consensus statements.

In this section this international consensus statement is highlighted as it is from these statements the various statements relating to the content and training methodologies were developed. It is noteworthy most African countries and Asian countries did not act on the

recommendations of t these international consensus statements; it is no clear from literature whether these countries were represented or agreed to these proposals. Whatever the case, it later in year 2000 when the issue of globalization was mooted that African and Asian countries were highlighted. The following is the list of these statements;

The following eight recommendations were made in the international consensus statement done in the Netherlands: a. teaching and assessment should be based on a broad view of communication in medicine; b. communication skills teaching and clinical teaching should be consistent and complementary; c. teaching should define, and help students achieve, patient-centred communication tasks; d communication teaching and assessment should foster personal and professional growth; e. there should be a planned and coherent framework for communication skills teaching; f. students' ability to achieve communication tasks should be assessed directly; g. communication skills teaching and assessment programs should be evaluated; h. faculty development should be supported and adequately resourced. Following these statements countries and held various meetings to develop coherent frameworks for teaching and assessments of communications skills including BBN.

The body of research used to develop these content and methodology were based on over 30 years of research and among the were those of, (Aspergren, 1999), (Stewart M. B., 1999) (Silverman J. K., 2005) (Simpson, 1991) (Makoul G. S., 1999) and (Suchman, 2003). First the standard domains common in medical practice must be applied also in communication skills including BBN, these domains have been discussed below in this literature review. The following section will summarize based on literature review the basic

content and structure of the curriculum in communication skills teaching and assessment which includes breaking bad news tasks.

Secondly, the curriculum requires planners to take a helical rather than a linear approach to clinical communication teaching. This provides opportunities for learners to review, refine and build on existing skills while simultaneously adding new skills and increasing complexity. Studies show that, if helical communication teaching do not run throughout the course, students will fail to master communication (Kurtz, 2005). Thirdly, this not only calls for curriculum structure but also documentation of skills levels on the helix. Communication skills competencies can therefore be divided into basic, intermediate complex and complex communication skills (Stephen G. H., 2013). This communication skills level cannot be possible in linear curriculum model.

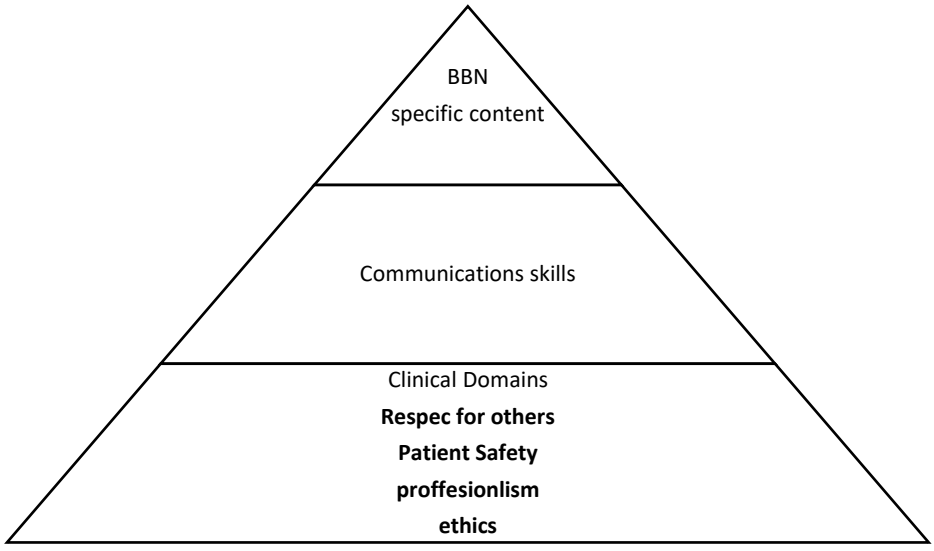
Fourthly communication is always purposive and most of the activities of the medical interview can and should be taught as tasks. Many well-established consultation models and recommendations have listed these tasks (Cole, 2001) (Makoul G., Essential elements of communication in medical encounters: The Kalamazoo consensus statement., 2001) (Education, 2001) (Kurtz S. S., 2003). Experienced doctors operate flexibly and may choose from a mixture of models. These communication process tasks are closely linked to the content of the interview and hence in line with this recommendation each task should be clearly documented with the relevant task process.

Fifthly, communication skills teaching, and assessment must include how to tackle the many challenging contexts and situations for doctors when they communicate with patients. The skills necessary to carry out the tasks of the consultation provide a secure

platform from which to tackle specific communication issues. These challenging situations have been listed in the literature above however it is mentioned here in order to emphasize the fourth requirement in teaching and assessment of breaking bad news tasks.

Finally, the sixth requirement is the training and assessment of how to cope by the doctors described as reflective practice which includes personal self-awareness and dealing with uncertainty, whether concerning diagnosis, optimal management or prognosis. This requires the student to develop self-awareness and the ability to: recognize areas of personal challenge; understand the extent to which personal views and values can clash with professional responsibility and the potential impact this might have on communication with patients; recognize his or her own limitations; understand when there is a need to refer.

These components have clinical domains that cut across all of medical practice and hence a requirement for any medical doctor. These domain forms the base on which the communications teaching and assessment stands on without which competence in BBN is an illusion, these are depicted below include:



The following literature looks at components of the base that cuts across all medical competencies followed by a look at communication skills in general which forms the technical knowledge of communication skills and finally specific content for breaking bad news communication.

2.4.1 Clinical domains necessary for competence in BBN

2.4.1.1 Respect for others

The most important aspect underlying all other components of effective clinical communication is respect. Respect for all patients and be flexible with individuals, regardless of social, cultural, or ethnic backgrounds or disabilities. The culture in any country is diverse and requires all aspects of these diversity must be respected. There is therefore need for respectful partnerships with their patients and colleagues. Theory and evidence of communication skills, though largely focuses on the acquisition of skills, are underpinned by a significant body of evidence and theoretical frameworks (Stewart M. B., 2000) (Silverman, 2005) (Makoul G., The SEGUE Framework for teaching and assessing communication skills, 2001).

For respect for others to be effective learners or doctors in training must be aware of this literature related to patient satisfaction, recall, adherence and concordance, wellbeing and physical outcome for them to have knowledge of interpreting and acting upon it appropriately. These attributes are discussed below:

Adherence: The non-adherence by patients is an issue that is threatens health and wellbeing, though pervasively. Nonadherence is seen in up to 40% in some diseases which

carries a significant risk to the patients. There is no single intervention to address the issue of non-adherence, however research has shown key factors that can be used to successfully address the problem. These include but no limited to realistic assessment of patients' knowledge and understanding of the regimen, clear and effective interpersonal communication between doctors and their patients, and the development of doctor patient relationship where trust and therapeutic relationship is created. The humanistic approach to patient care i.e. knowing the patient as person and not a case, allows the doctor to understand the patients circumstances and their view of the issues at hand including: beliefs, attitudes, subjective norms, cultural context, social supports, and emotional health challenges, particularly depression. Doctor-patient relationship is crucial in choosing the option for treating the patient to maximize adherence. A successful mutual collaboration the leads to greater patient satisfaction and significant reduction in non-adherence with a better treatment outcome and better-quality healthcare. Some of the factors associated with non-adherence are discussed below.

Cognitive factors: As indicated above, reduction in nonadherence starts with understanding what the patient should do to follow medical recommmendations. Therefore the lieracy of the patient is crucial and takes a central role in abilty to adhere to treatment recommendations.. Healthy People 2010, suggests that health literacy involves the “degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions” Other studies have documented the risk of nonadherence in patients who cannot read nor write and therefore unable to follow written instructions form the doctor. William et al in (1995) looking at a large group of patienst 2500 found that misunderstanding of doctors instructions are

common. The findings in that study showed that nearly one third had marginal or inadequate health literacy. Of these, 42% misunderstood directions for taking medications on an empty stomach, 25% misunderstood the scheduling of their next appointment, and nearly 60% were unable to read and understand a typical informed consent document (William eta al. 1995).

Language barriers may have contributed to some extend to this findings, but even when the patients undertood the language and their medical instructions, many could not comprehend or understand the medical information. Other fucators were older patients had significanlty worse porblems in understanding the treatment recommendations than the younger patients. This is confirmed in other studies where these trensd and interventions aimed at improving medical literacy with the hope of improving patient adherence have so far been disappointing to say the least. (William et al. 1998)

Medical literacy of patients contributes to patients health beliefs which in turn contributes to nonadherence. Anerella et al. in 2004 gave a high quality information to asthma patients in the use of daily inhaled steroid therapy for the treatment of their conditions found only 38% adherence and 62% nonadherence because the patients mistakenly believed that they were to use medication when they get the attack of asthma. Inefective physician patient communication and physician failure to assess recall and comprehension has been lnked to lietracy aprticulryl medicla litercay. The same medical lieracy has also been lnked with depression which affects the way patients comminciate with their doctors. The same issue of illieracy has been linked with poor and desparity in disease screning like mammography, papsmear etc which may be due to limited acess to written cancer prevention materials.

Ability to remember is another important issue in nonadherence and stidies have shown repeatedly that forgeting to take medication and how to take medications is a major contributor to nonadheence. This is so commen that even immediately after leaving the doctors consultaion room about 56% forget the instructions, this was found in one study sudy by (Ley et al 1965). Poor doctor patient communication composed of medical jargon impedes patients understanding and retention of information. Rehersal of medical treatemt instructions by the patient before the doctor to confirm understanding is desireable and many times repeated explanations. Healthcare providers need to explain the specific steps of the regimen, review the most important details, use written instructions, and encourage their patients to ask questions about the regimen for adherence to occur.

Patients who presented with large amount of information at once and also who are anxiuos of their medical conditons tend to forget of the information, patients tend to do better if they know their doctor well and this depends on afefctive developemnt of doctor patient rlationship. Satisfied patients, who tend to be happy tend to also to recall the information better, this patient satisfaction has to do with empathic doctor patient relationship in the communication cycle. This element of satisfaction and empathy and important elements in the medical encounter asociated with better recall and agerence to medical instructions.

Interpersonal factors: The interaction of patients with their doctors described as interpersonal dynamics in the physician–patient relationship are known to play an important role in the determination of a variety of patient treatment outcomes which include patient adherence to their treatment recommendations and patient satisfaction. On the other hand, patients with a feeling that their physicians communicated well with them

and empathically and actively encourage them to be involved in their own care tend to be more motivated to adhere to the treatment instructions. Also when there is agreemnt between the patient and the doctor about the care f the patient which may involve the dcoor knwoing what the patient wants or dont want, adherenec to medical information improved. There is therefore a great need to have sucessful communication between physcian and patients in order to quarantee adherence and patient satisfaction. Trust created by a good doctor patient interaction is essential for patients to have emotional disclosure. A basic issue in doctor patient communication is managing emotions and this skils is crucial in trust developemnt in doctor patient relationship.

2.4.1.2 Proffessionalism in practice

A patient who cried before the dcotor and poored out her heart and her concerns to the doctro and felt that the doctor was caring enough, will have developed strong and active trust and will have better adherence and feel satisfied. Honesty and trusting reltionship between the patient and doctor greatly affect the patient outcomes whether in adherence or patient satisfaction. Tudies have shown for example, that that physicians who promote trust in the therapeutic relationship, who have effective communication and “bedside manner”, and who express compassion for their patients succeed in fostering cooperation and patient adherence with a variety of preventive and treatment recommendations. Adherence rates some studies have found to be nearly 3 times higher in primary care relationships which are characterized by very high levels of trust coupled with physicians' knowledge of the patient as a whole person. This has been found to exceed many other

variables including seniority, specialization of the physician when it comes to promoting patients' satisfaction with their care.

Patient involvement and participatory decision making: When aptients are involved in the decison of their care, studies have found that both patient satisfaction and patient adherence are enhanced by patients' involvement and participation in their care. When partnership is obtained the physician patient behaviour tend to be reciprocal. Patients who want to be more involved tend to ask more questions and display more confidence, and physicians who are willing to sustain collaborative relationships with their patients tend to act in ways that prompt their patients to be involved and active. Research has also shown that patients who participate in discussions of behavioral strategies with their doctor are more likely to adhere to antidepressant (Lin et al.2004) This idea of reciprocity and mutuality between patients and their physicians physican patient interaction is sometimes sometimes referred to as concordance which has been identified as key to greater patient involvement in decision making. When conccordance in health that is professional–patient relationships are concordant, patients easily understand and follow the costs and the benefits of their recommended regimens, and through the normal process of discussion and negotiation with their physicians they arrive at a better understanding of treatment.

There is understandable need to desire physicians and patients to work together and strive for mutual agreement, so that they both achieve higher levels of satisfaction with the treatment encounter. This is reciprocal exchange of information and is a vital element in the decision making process where patients are actively involved. Patients have been found to tend to be more satisfied with such exchanges and agreement and take more

responsibility for adherence and adhere better to treatment choices that are made jointly. This applies to even when dealing with life treatening and serious illness such as cancer, most patients have been found to desire and require all possible information regarding their condition and treatment and prognosis, even if that information is initially emotionally disturbing to them. The health professional's ability and willingness, which requires training, to enter this discussion of breaking bad news and process of negotiation with patients is critical to subsequent outcomes.

Patients' attitudes: The discussions above about patients' understanding and comprehension of their recommendations and good physician–patient relationships are, of course, not sufficient to eliminate the risk of nonadherence. The other issue is patients' attitudes, beliefs, and group norms which all influence adherence in meaningful and sometimes complex ways. Theories have been developed based on various cognitive and behavioral models, such as the Theory of Reasoned Action (Ajzen, 1980), Theory of Planned Behavior (Ajzen, 1985) and the Transtheoretical Model of Change (Prochaska, 1984). Which show and demonstrate that people's intentions to carry out a behavior, in this case to follow medication treatment, are the immediate precursors to the behavior itself. This means therefore that *intending* to adhere, whether this is labeled an intention, a readiness, or a stage of change, is essential to following treatment advice. Intentions which are inherent in people, in turn, depend upon what people think and believe, what attitudes they hold, and how other people influence them. Thus, if patients hold beliefs that are incongruent or not agreable with what their physicians prescribe for them, or if their family or social group members hold divergent views about their illnesses and treatments, patients may have difficulty even forming a willingness or intention to adhere. The social environment and

the social support available to patients also affect their willingness to adhere, especially when dealing with such conditions as depression, anxiety, HIV, and other illnesses that carry a potential stigma (Rotter & Hall 1992)

Cultural variations: It is obvious that involent by patients in their care varies across cultures and of course, the best way for physicians to facilitate their patients' involvement in care varies across cultures. Preliminary research results from ongoing studies with several ethnic groups done in Indonesia demonstrate that interventions aimed at increasing adherence require a multifaceted approach and sophisticated understanding of the complexity of issues involved. Guidelines for improving patient adherence must be tailored to the cultural backgrounds of the individual patients. Although some research has shown positive correlates and outcomes of partnerships when patients and physicians are of the same ethnic other studies have failed to demonstrate this effect and suggest that matching physicians and patients according to their ethnicity is not necessary. Certainly constructs such as ethnicity, age, and gender are not unimportant, but they interact in very complex ways and may not be as important as communication factors. Recent evidence suggests that physician–patient congruence on their preferences for patient involvement in care is more important than congruence on demographic variables such as ethnicity, age, or gender. This study evaluated each of these demographic characteristics and found that congruence in preferences for patient involvement was the only significant predictor of self-reported patient adherence, accounting for approximately one fourth of the variance; similarity in age or being of the same ethnicity or gender were unrelated to adherence. These findings illustrate the importance of discussing the physician–patient partnership and together negotiating the patient's role, and suggest that communication (both verbal and

nonverbal), partnership and participation, behavior modification strategies, and the prompts and reminders that encourage adherence should be developed uniquely for each individual patient.

In addition to attitudes and sociocultural norms, patients' perceptions of their physicians are also very good predictors of patients' intentions to adhere. In a study we are currently conducting in conjunction with the Bayer Institute for Health Care Communication, our preliminary findings suggest that (in a US sample) patients' intentions to adhere to their recommended treatments are significantly correlated with having choices regarding medical treatments; having the opportunity to discuss their care with their physicians; having their preferences taken into account; and having a doctor who communicates well (all significant at $p < 0.001$). In addition, preliminary data confirm and extend previous research showing that the amount of trust patients have in their physicians is a strong predictor of whether they plan to carry out treatment recommendations.

Depression : In meta-analysi of research, findings mental health and particularly depresion suggest that it is one of the strongest predictors of patient nonadherence to medical treatment. In this study, the risk of patient nonadherence is 27% higher if a medical patient is depressed than if he or she is not (it is 30% higher if that patient has end-stage renal disease). Depression has long been known to predict poor health outcomes, a fact that may be explained partly by the adherence problems caused by depression. Depressed patients experience pessimism, cognitive impairments, and withdrawal from social support, all of which can diminish both the willingness and ability to follow treatment regimens.

Depression is a prevalent and powerful factor in health and illness, and one that cannot be ignored especially when the conditon has no medical cure and the medical instructions are mainly to prolong live and have better patient comfort. It is associated with impairment equal to or greater than that of chronic recurrent disorders such as diabetes, hypertension, arthritis, and emphysema. Depression is currently the most prevalent mental illness and a cause of immense disability in industrialized countries. Major depression is second only to coronary heart disease in functional limitations and serious role impairment. Depression has been cited as the most common clinical problem that primary care physicians are called upon to diagnose and treat. In a given year, in primary care settings, up to 20% of adults present with depression which is often associated with comorbid anxiety.

The assocaition of mental disorders with chronic illness and mortality rates are increasing being found and many clinicians fail to make a diagnsois of these mental disorders. Young et al. found tha primary care physicians fail to this is despite the potential harm to patients' adherence and health. Even when depression is recognized, it is diagnosed and treated accurately only 30%–40% of the time. In the Medical Outcomes Study, 60% of patients with major depression received no medication at all (Wells et al. 1994). This findings show that the opportunity to manage major risk factors for nonadherence and for serious patient morbidity and mortality is often missed in primary care.

Why does such a serious risk factor for nonadherence (and other poor healthcare outcomes) so often go unrecognized in the primary care medical interaction? Research suggests that the problem is both patients and their physicians who contribute jointly to this problem in the medical interaction. Patient factors that prevent recognition of depression in primary

care include lack of awareness and understanding of depression symptoms, complaints of physical symptoms that take precedence or confuse the clinical picture, and failure to admit to psychological symptoms because they fear a stigma of mental illness. Patients may be reluctant to talk about non-medical matters because they expect physician disinterest or the risk of embarrassment, or because of anxiety about the possible significance of their psychological symptoms (Rotter & Hall 1992). Also physician factors have been known to be involved and can also interfere with the recognition of depression in primary care settings. Most of the physicians who contribute to this show lack of knowledge about the disease, lack of training in the management of depression, reluctance to inquire about their patients' emotional states, and limited time available for patients. Doctors have been knwon to respond differently based on patients' health status and this has also been shown that it can influence the degree of interest and responsiveness they receive. Even physicians have been known to convey greater negativity toward physically or mentally less healthy patients and to act more positively toward healthier ones (Hall 1996). Though these barriers have been known, recognised and appreciated, depression continues to be the main source of nonadeherence. It is important to appreciate the importance of patients' mental health in the care of their acute and chronic medical conditions becasue it can help to reduce the risks of nonadherence and contribute to more positive health outcomes. New and developing models of depression management in primary care show great promise for improving patient commitment to and ultimately the success of medical treatments.

Improving patient adherence: It is of inetrest to any healchcare system to improve patient adherence and the first step toward improving patient adherence must involve accurate assessment of whether or not patients have followed the treatments recommended to them.

This is not easy as the precise estimation of patient adherence is not easy, and a full understanding of whether and why any given patient chooses and is able to adhere is often elusive. Physicians are typically not well informed about their patients' adherence, and reliance upon their own intuition or upon attempts to “catch” their patients in nonadherence can be quite problematic. Patients tend to be truthful in their adherence reports only when they feel free to admit adherence difficulties without the risk of criticism and in the context of true partnership with their physicians. The accurate assessment of adherence depends and comes back, to a large degree, on the development of a trusting and accepting relationship between the patient and the healthcare team. Adherence assessments that are simple (presenting as little burden to the respondent as possible) and nonthreatening will also likely yield the most honest and accurate responses. The need for realistic assessment of patients' knowledge and understanding of the regimen, and their belief in it, will enable a more effective targeting of the potential for adherence problems.

Many of the factors necessary to carry out such assessment are the very elements that foster communication and partnership in the medical visit. Patients need to be given the opportunity to tell their and to present their point of view to the physician. From this, much information about patients' beliefs, attitudes, subjective norms, cultural contexts, social supports, and emotional health challenges (particularly depression) can be learned. These elements are central to the establishment of adherence intentions, and must be explored and discussed in the therapeutic relationship. Perfect agreement will not always be reached, and in fact may not be desirable. Some degree of conflict between the views of physician and patient may be necessary if truly adult collaboration is to take place and a variety of therapeutic options, and ways to adhere to them, jointly considered. The acknowledgment

of differences is an important part of building respectful and trusting relationships between physicians and their patients.There cannot be a single strategy or interventional strategy taht can improve the adherence of all patients, success can only depends upon tailoring interventions to the unique characteristics of patients, disease conditions, and treatment regimens. An example is seen wher some patients may be unable to maintain a complicated regimen without a strong system of social support and many prompts to remind them of what needs to be done. Other patients may have problems keeping appointments because they do not have access to reliable transportation or because family emergencies arise. Still others may find that side effects of medications are prohibitive or they may simply be unmotivated. The healthcare provider must be attuned to the individual, picking up on subtle hints (verbal and nonverbal) that the patient may express. A flexible mindset in which the physician thinks creatively about treatment options is always an asset. The physician–patient partnership itself, however, remains at the core of all successful attempts to improve adherence behaviors. Participation, engagement, collaboration, negotiation, and sometimes compromise enhance opportunities for optimal therapy in which patients take responsibility for their part of the adherence equation. These partnerships foster greater patient satisfaction, improved patient adherence, and ultimately optimal healthcare outcomes.

2.4.1.3 Patient safety

Medicine has always had an inherent risk as an enterprise, the promise and hopes of benefit and cure are always linked to the high possibility of harm. The word ‘pharmakos’ means both remedy and poison; the words ‘kill’ and ‘cure’ were apparently closely linked in

ancient Greece (Porter, 1999). Among the so called cures, looking back with the knowledge and wisdom of today, many of these so-called cures now seem to be absurd, even cruel. But considering that most doctors have no intention to harm, it is in all probability though, the doctors who inflicted these cures on their patients were intelligent, altruistic, committed physicians whose intention was to relieve suffering. The thought to be entatertained is that medicine has inheren possibility of harm, especially at the frontiers of knowledge and experience. We might think that the advances of modern medicine mean that medical harm is now of only historical interest but all forms medical practie has this inhenerent possibilty of harm. The so-called heroic medicine was, in essence, the desire and willingness to intervene at all costs and put the saving of life above the immediate suffering of the patient. As (Sharpe & Faden, 1998) have pointed out, when reviewing the history of iatrogenic harm in American medicine, it is this period that stands out for the violence of its remedies. Heroism was certainly required of the patient in the mid-19th century. For instance, in the treatment of cases of 'morbid excitement' such as yellow fever, Benjamin Rush, a leading exponent of heroic medicine, might drain over half the total blood volume from his patient. Yet Rush was heroic in his turn, staying in fever ridden Philadelphia to care for his sick patients. Rush explicitly condemned the Hippocratic belief in the healing power of nature, stating that the first duty of a doctor was 'heroic action, to fight disease'. This extreme practices of medcine may have done more hharm than good.

It is not only the treatment doctors give but hospitals could and is also known to be a be secondary sources of harm, in which patients acquired new diseases simply from being in hospital. The harm caused by anaesthesis had be reduced by 19th century and this developemnt allowed surgeons time to operate in a careful and deliberate manner. However

infections were rife and sepsis was so common, and gangrene so epidemic, that those entering hospital for surgery were equated to ‘exposed to more chance of death than the English soldier on the field of Waterloo’ (Porter, 1999: p. 369). The term ‘hospitalism’ was coined to describe the disease promoting qualities of hospitals, and some doctors believed they needed to be periodically burnt down. As late as 1863, Florence Nightingale introduced her Notes on Hospitals, as follows: ‘It may seem a strange principle to enunciate as the very first requirement in a Hospital that it should do the sick no harm. It is quite necessary, nevertheless, to lay down such a principle, because the actual mortality in hospitals, especially in those of large crowded cities, is very much higher than any calculation founded on the mortality of the same class of diseases amongst patients treated out of hospital would lead us to expect’. (Sharpe & Faden, 1998: P. 157)

2.4.2 Technical competencies in BBN

Any communication should be purposive, therefore all the activities the process can be taught as tasks. A number of well-established consultation models and recommendations list these tasks. (Cole, 2001) (Kurtz, 2005). Experienced doctors operate flexibly and may choose from a mixture of models. The tasks are typically associated with these models: establishing and building a relationship, initiating (i.e. opening the consultation and setting the agenda), establishing, recognizing and meeting patient needs, gathering information, eliciting and considering the patient’s world view, conducting a physical examination, formulating and explaining relevant diagnoses, explaining, planning and negotiating, structuring, signposting and prioritizing and closing (ending the interview and setting up the next meeting). These communication tasks are closely linked to the content of the

medical interview. Each task should have a task process which makes it easier for the leaners to learn the task. The importance of task process in the success of medical doctors cannot be overemphasized (Lahmann, 2014) (Martin, 2008). BBN has indicated above is a communication skill requiring the basic skills in communication, these are listed and also cuts across all forms of communication skills.

Verbal and Non-verbal Communication: The message is the core idea a sender wants to communicate. The sender should carefully decide upon the precise message that he wants to communicate and its purpose. He should take into consideration the context of his communication and the attitude of the receiver. Based on these factors, the sender should choose the code and the medium for transmitting the code. The receiver should be familiar with the code and be competent to access the medium of transmission. The sender cannot e-mail a message to a receiver who is not computer savvy, nor can he write a letter to an illiterate. It is interesting to note that a vast majority of us communicate several messages without using speech quite often. In fact, one theory on the origin of language is called the Gesture theory, which tries to establish that speech originated from gestures. Someone has aptly said that communication oozes out through one‘s finger tips. Though this may appear to be an exaggerated statement, it is truth. Do we not nod our heads to show approval or shake our heads to indicate disapproval? When you are offered a cup of coffee you not only say: ‘No, thank you’ but, also shake your head or cross your hands. When someone attempts to touch you for a penny, you indicate your denial through words as well as shaking your palm. When someone is in difficulty, he wrings (twists) his hands in frustration. The study of body movements is also known as Kinesis. Body language is so important that a description of it has entered our spoken language. You say that someone

blinked to mean that he was confused; someone was bleary eyed to mean that he was not focusing, and someone kept his fingers crossed to mean that he was eagerly anticipating and so on and so forth. Our language itself has several such expressions recognizing body language. Communication experts point out that only a small percentage of communication is verbal whereas a large percentage is through body language. The following features of one‘s bearing or demeanor (way of behaving) is part and parcel of communication.

The way a person stands, or sits is his posture. It is good to adopt a flexible erect posture rather than a stiff or slouching posture. An erect posture reveals confidence and poise. Drooping shoulders, sagging in the seat, etc., reveal a feeling of depression and lack of interest.

Head motion: In oral communication, the movement of the head plays an important role. No one is expected to keep on shaking his head, but appropriate nods and shakes of the head enhance the level of communication.

Facial Expression: Face is the index of the mind. We say, ‘she put on a long face’ to mean that she was not in the best of her moods. However much one tries, his hidden feeling of anger, fear, confusion, uncertainty, enthusiasm and joy will get revealed by the facial expression. Sometimes, the words that you utter may be contradicted by your facial expression. A teacher might ask the student if he understood the idea, but he should not wait for an answer. A lack-luster bewildered facial expression would reveal that the student has not grasped anything.

Eye Contact: In an oral communication context, the speaker and listener should not only face each other but also maintain correct eye contact. If someone avoids direct eye contact, he is suspected to be sly or cunning. In eastern countries, subordinates or younger people may avoid direct eye contact out of respect or deference, but it will be misunderstood in an international context. The Tamil poet Subramanya Bharathi has praised upright bearing and straight eye contact.

Gestures: Movement of hands and fingers enhance communication. But gestures are culture specific. A clenched fist may mean emphasis for an American but disrespect for an Indian. Thumbs up sign, a movement of the index finger communicates messages effectively. Non-verbal communication in short, adds, subtracts and amends our message. In an oral communication context, all the above features of body language play an important role. If you expect to communicate in a relaxed atmosphere, you have to kill and destroy the stiffness with appropriate components of body language. Though gestures are culture specific some of them have become universal cutting across cultural boundaries. A wave of the arm is for a ‘hello’ or a ‘good-bye’. Emblems directly stand for a verbal message. Certain gestures are illustrators for they illustrate a point. An arm can be used to draw a circle. The index finger shown with a little shake stands to emphasize a point as an illustrator. Certain gestures made unconsciously will reveal the mental state of the speaker. Anger, fear, nervousness etc., are often revealed by fidgeting, shifting of legs etc., Twisting the shirt button or cufflinks, rubbing the neck-tie, scratching the cheek, nose, stroking the chin are some of the innumerable unconsciously acquired gestures. If overdone, they may degenerate to the level of mannerisms. One must avoid the habit of over-gesturing in oral communication. Body language can be studied elaborately under kinesis which makes a

scientific and analytic study of the subject. Oral communication takes place in face to face or one to one situation or when a speaker addresses an audience. The audience may be small as in a group discussion or large in the case of some business meetings. In all these situations, body language plays an important role.

Paralanguage: In oral communication situations paralanguage plays an important role while speaking or listening. The speaker or listener makes use of sounds like Hmm'….ha.., or clicks his tongue or chuckles. These sounds though do not have a semantic value (meaning), are in fact important prompters in maintaining an unbroken communication chain. They are effective tools of listening. Empathetic listening (ability to imagine and share another person's feelings, etc.) is characterized by the use of paralanguage. Our speech is affected by the volume of our voice, the speed of articulation and such sounds made by clicking of our tongue, chuckling, etc. We come across people whose voices quiver when excited. Some others raise the decibel level of their voice. These are people who shriek or shout when provoked. All these lead to an evaluation of the personality of the communicator.

Voice and Tone: It is possible to communicate an unpleasant information pleasantly or good news badly. When you tell someone, 'you have done a great job', it is your statement and the tone together show the receiver whether you are complimenting him or ridiculing him. A complimentary tone is distinctly different from a sarcastic tone.

Space: In oral communication situations, the space between the speaker and the listener is important. Americans consider that a person who comes very close to him while speaking, say, less than two feet is invading into his privacy. Only in intimate and personal situations

can people move closer than a foot and a half. To us, who are used to overcrowded public transport system, the American practice of maintaining space in the elevator will be rather surprising whereas to him our invasion of his personal space revolting.

Silence: In oral communication situations, silence plays an important role. People quite often talk about eloquent silence. Yes, silence can send communication signals. Silence in a particular situation may mean acceptance, agreement and in certain others indifference, apathy or even anger.

Listening; a Proactive Skill: In oral communication situations, listening plays an important role. Listening is different from hearing. One can hear all noises and sounds and yet could be a poor listener. Listening is hearing attentively and responding appropriately. Only a good listener can become a good speaker. Attentiveness begins with the posture a listener adopts while he is listening. If a person inclines towards the speaker, it means that the speaker is not clear either in the message or in his articulation. If the listener tilts his head backwards, it shows that he is indifferent. A Good listener is proactive. He is, as they usually say, ―all ears. He responds appropriately using paralanguage. He says, Hmm—yeah—yes—come on now and then. He asks questions and verifies facts. A listener ‘s role in an oral communication situation is as important as a speaker ‘s role. Listening in communication has several beneficial results. Good listening leads to getting useful and updated information. Good listening creates a better understanding and rapport between the speaker and listener. Good listening leads to better decisions. Good listening provides the best feed back to the speaker.

In summary these verbal and nonverbal communication techniques and gestures are required in the same measure in all forms of communication including BBN. The grasp of these techniques is always associated with better perceived competence in BBN. Learning this technique requires practice with feedback and the only way this can happen is through role plays, video recording of the conversations and reviewing with the faculty. The best methodologies utilized in training doctors with be reviewed later in literature.

2.4.3 Correct attitudes in BBN

Competence in BBN is not complete without the correct attitudes being learnt and developed. One of the crucial feature of correct attitude is Empathy. Empathy is one of the primary communication skills in effective physician-patient interaction (Halpern D. F., 2001). There are numerous definitions of empathy found in the medical literature. Eagle and Wolotsky (Eagle, 1997) describe empathy as "putting oneself in another person's shoes and getting a sense of that person's perspective and what he or she is experiencing, feeling, and thinking" (Eagle, 1997). Empathy is a construct that includes three components: cognitive, behavioral, and affective (Kurtz S. S., 2005). The cognitive part of empathy reflects the ability of an individual to imagine "what this experience would be like for me." The behavioral dimension of empathy represents an individual's ability to not only think empathetically, but also demonstrate it in the presence of another's emotions (Halpern D. F., 2001). The affective component is described as an empathic concern or feeling of compassion for others. Empathy is robust evidence for humanistic physician patient interaction (Dickson D. I., 2004). Furthermore, the empathetic approach includes a nonjudgmental element, which deters the practitioner from prejudging the client's

behaviors, beliefs, or attitudes (Banja, 2006). The research suggests that current medical education develops an “uninvolved” attitude in medical students (Banja, 2006) (Halpern D. F., 2001).

Traditional medical education is based on scientific reasoning, which appears to value objectivity and technological support, not an emotional aspect of physician-patient interaction (Buckman, how to break bad news- A guide for Healthcare Professionals., 1992) (Eagle, 1997) (Kurtz, 2005). According to (Kurtz et al., 2005), empathetic skills include: (a) attentive listening, (b) clearly conveying the message, (c) facilitating the expression of patients’ emotions, (d) acceptance, (e) nonjudgmental response, and (f) use of silence. Research indicates that empathetic skills can be learned (Halpern D. F., 2001) (Maguire P. , 1999)

2.5 Curriculum content in BBN.

The curriculum should allow student to learn specific communication skills for different situation especially in BBN, examples are; dealing with emotions, dealing with severe distress; fear; anger; aggression; denial; collusion, and embarrassment, the skills specific for this kind of situations are vastly different from normal communication skills. The curricular must put in place these skills as tasks and each task broken down into steps which are followed wile dealing with the situation.

Issues of uncertainty require skills that enable the health care professional to deal with: issues concerning uncertain prognosis; changing relationships with patients (the expert patient; the well-informed patient) and medically unexplained symptoms, skills that enable

them to: break bad news; discuss death, dying and bereavement; talk about sex; explore a patient's gynecological history, and discuss issues that involve stigmatization, such as child abuse, HIV infection and mental illness and Communicating beyond the patient which includes: Relatives, inter-professional, intra-professional and Advocates and interpreters. The universities in the United Kingdom have developed and dice like content in curriculum implementation in communication skills. (Martin, 2008).

Traditionally and historically, medical education has focused mainly on technical proficiency and often neglected communication skills (Monden, Gentry, & Cox, 2016). This may have been acceptable when doctor–patient relationships were paternalistic, however it is no longer acceptable in the age of patient autonomy. This patient autonomy is seen in the western developed world, however in Africa and the developing world the significance is now being noticed as more and more patients demand to be know their diagnosis. This has been aided by the technological progression. Engel introduced the biopsychosocial model of medical education four decades ago and this has led to a shift in the way care is given to patients with emphasis on psychosocial aspects. The change has been seen in developing countries as an attempt to include communication skills in undergraduate medical curriculum, but the effect in clinical practice largely remains technical with little if any psychosocial aspect of care. Among the crucial skills in the biopsychosocial curriculum if delivery of bad news. (Engel, 1990) Abbas et al. found that 40.2% of physicians remains with no formal training in breaking bad news communication while in 2000, Baile et al. reported that less than 10% of physicians had received formal training on delivering bad news (Baile W. F., 1999). In recent years, researchers have been paying a considerable amount of attention to understanding how physicians tackle the

difficult encounter of breaking bad news to patients (Gillotti, Thompson, & Wood, 2002; VandeKieft, 2001; Voelker, 1999).

Though there has been increased awareness in the role of this important task the percentage of healthcare providers formally trained remains modest relative to the anticipated need. In the same study they concluded that "Medical schools and post-graduate training programs are strongly encouraged to tackle this gap in medical education".

Protocols are structured and specific content in breaking bad news and are relatively easy to use. There are a few protocols, like Spikes (Settings, Patient's perception, Invitation, Knowledge, Explore/Empathy, Strategy/Summary) and ABCDE (Advance preparation; Build a therapeutic environment/relationship; Communicate well; Deal with patient and family reactions; Encourage and validate emotions) and both of them have a small introduction before the news, the news itself, and a time for patient and family reactions. Despite this freely available protocols, not all medical schools teach communication or empathy (Rappaport, 1993) (Mostafazadeh-Bora, 2017), (Ury, 2003), even with evidence that concepts are not acquired concepts spontaneously. Considering the importance of breaking bad news in doctors' daily routine, we need to think seriously about teaching techniques in medical education to preparing medical students to be more humanized graduates.

Evidence-based studies suggest that communication skills can be taught (Orlander, Fincke, Hermanns, & Johnson, 2002) Studies show that better physician-patient relationship makes patients feel better (Park, Gupta, Mandani, Haubner, & Peckler, 2010), increases treatment adherence, improves pain management and the prognosis of chronic diseases, and

decreases symptoms. Confidence in physician patient interaction leads to better management of patient, less litigation, and less errors. There is also evidence that without training breaking bad news cannot improve on their own. Despite evidence showing that doctors struggle to deliver bad news and patients suffer as a result of this failure, teaching techniques and learning methods became key for successful physicians who are able to be empathetic. Nevertheless, not all medical schools include the subject in curricula, even though those are not concepts acquired spontaneously.

2.6 Methods of content deliver in BBN

The discussion have above have mainly related to technical aspects of what doctors must learn to be competent in BBN, we now move to how we teach and assess doctors to ascertain competence in BBN. The `instructional' or `traditional' method of learning communication skills in medicine is where the student is shown how to do an interview by a teacher, either by lecture or by example, and then repeat it with or without feedback. The `experiential' method is to do the interview oneself and later to receive feedback from the teacher. Experiential methods thus presuppose some form of recording of the student' s interview, which is easiest done by video- or audiotaping. (Marcy, 2004)

Maguire et al. (1977) randomized medical students in their clinical year to three teaching formats: (1) Traditional teaching by demonstration and repetition (control group). (2) First reading a primer material, then watching a demonstration of a videotaped interview by a teacher and repetition of it by a student, followed by group discussion. (3) First reading primer material and formulating one's own questions, later watching the teacher's and the student's videotaped interview, and discussing it. The effect of the three teaching formats

was controlled by subjecting all participating students to a standardized test interview which was recorded and later scored by a blind independent observer. Groups (2) and (3) obtained significantly more information from the patient in the test interview. Maguire and co-workers then randomized students to: (1) Traditional teaching by auscultation (control group). (2) Videotaped patient interview, which was rated by a teacher who gave written feedback after a few days. (3) Audiotaped patient interview with immediate individual feedback by a teacher. (4) Videotaped patient interview with immediate individual feedback by a teacher. The teaching lasted for four weeks. Pre- and post-test were by videotaped standardized interviews, rated by blind independent observers. The trial showed that students who got some form of feedback (groups 2, 3 and 4) obtained significantly more information than the control group. When interpersonal skills were rated, groups (3) and (4) were significantly better than groups (1) and (2) (Maguire et al., 1978). Feedback of four students simultaneously was as effective as giving individual feedback to students one at a time (Maguire P., 1999). These results were confirmed by other workers in a high-quality randomized study. Here students were randomized to (1) auscultation, (2) instruction and (3) instruction plus immediate feedback on the student' s own videotaped interview. Pre- and post-tests were done and rated by an independent blind observer. The result showed that only students in group (3) improved their ability to interview.

Recommendations for undergraduate medical education based on this review, All medical students should receive training in communication skills because if they acquire these, they will be better diagnosticians and their future patients' compliance will increase, the training should use experiential methods and primarily address problem-based skills, to be effective, communication skills training should be given within clinical clerkships only,

The evidence for this is at present indirect, but is congruent with adult learner theory, attention should be paid to the fact that men are slower learners at communication skills courses than women.

The choice of teaching and learning methods in communication skills training depends on the program goals and objectives (Kurtz, 2005). Determining the rationale for the particular method in training is important and reflects the abovementioned goals and objectives. Practical considerations, such as cost, time constraints, and available resources for teaching will impact the choice of training method. The commonly used methods of training include didactic, video demonstrations with discussion, role-play, Strategies for active learning are instructional tools that are used to address content and process to achieve the objectives which include interpersonal skills development, communication skills and problem-solving skills which are done in both the current and traditional lecture-based classes. While dealing content, this allows students to increase their grasp of the content while using processes that encourage interpersonal communication, teamwork, and problem solving. These active learning strategies have been used widely used in many areas including; elementary and secondary educational settings, some post-secondary and adult education. This is because these active learning strategies promote learning through the actual and active participation of the learner; “teaching strategies and learning tasks used in university classrooms foster intellectual passivity because they focus on presenting knowledge, rather than constructing analysing, synthesizing, or evaluating knowledge.” (Wright, 1994) The instruction methods and styles have remained fairly the same with the same structure of classrooms which are structured around faculty authority and visual learning essentially traditional lecture based. These traditional teaching methods have

continued to promote an individualistic, competitive environment rather than fostering the skills of cooperation necessary to function effectively as part of a team.

One of the goals of active methods like progressive team approach in the management of patients calls for active involvement of medical students in their own education and training in essence active learning strategies. A shift in training strategies will promote and provide opportunities for students to develop thinking skills and interpersonal skills needed to function effectively in this new environment. Therefore; active learning strategies which emphasize small group activities reinforce the curriculum content for which medical students are assessed in by using strategies which address a most of the individual learning styles, therefore promoting development of the required effective team work and interpersonal skills.

There are overlapping characteristics between active learning strategies and formative assessments which are used to evaluate student understanding, active learning strategies allows students to engage actively with the content being learned which directly opposite to passively listening, watching or following a lecture or reading a textbook with the goal of building new knowledge or skills. To conclude therefore, active learning is also defined as learners' efforts to actively construct their knowledge. This is based on the Constructivist learning theory**,** developed by Piaget and others, asserts that students must connect new learning to their current mental model, known as a schema.

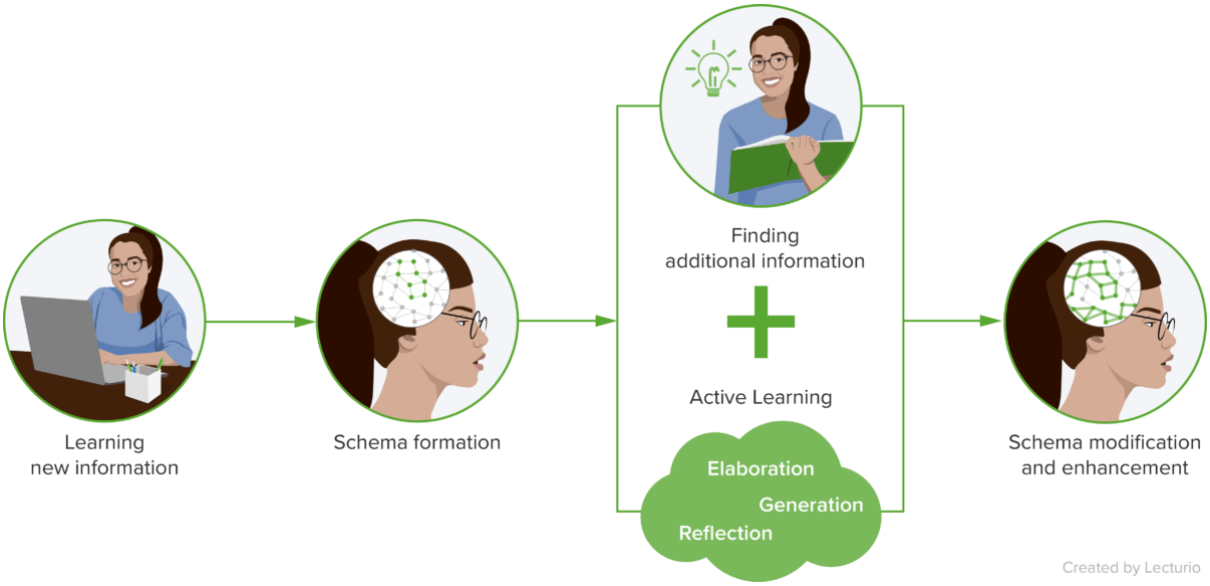


Figure 1: learning process from a neuroscientific perspective

Illustration of how schemas are formed and how active learning techniques can affect the learning process from a neuroscientific perspective (adopted from Lecturio)

These schemas have long been associated with long-term memory and due to these they have been thought to be involved in organization of information, memories, and experiences (Oakley, 2021 page 336). When new content or information is different or contradictory to learners' mental model, schema changes are required to understand the content and achieve understanding (Oakley, 2021 page 336). It is therefore agreed that schemas are very important in students learning because they allow new information to be connected to previously learned material (Oakley, 2021 page 336). The two neural processes of consolidation and reconsolidation require active learning. This is in order to form and strengthen new neural links. As noted therefore learning iscontinous never-ending process of schema modification, involving consolidation and reconsolidation.

The way to allow students learn effciently, is to have support structures which serve as scaffolds to help modify and enhance student schemas. This is achieved using active learning stratgies. The importance of scaffolding was identified by researches which have come up with the importance of scaffolding for learners in the context of Vygotsky's zone of proximal development: Active learning strategies which acts as scaffolding strategies can be designed by educators can help students in areas where content delivery, support and guidance are necessary to the goal of content competency.

When and if the content mastery and a more well developed schema are the hallmarks of expertise, which are some specific active learning strategies are employ so that learners are effectively towards these goals? All the active learning strategies fall under the follwoing important categories; elaboration, generation, and reflection. All the many different methods that education experts agree fall under the category of active learning are included in these three. The disccussion below will focus on three methods which are especially important in medical education.

Elaboration: This is an active learning strategy where there is involvemnt of the learner's enhancement of the information to be remembered. When the learners can develop an inferences, images, comparisons and illustrations, they lead to these amplifications and elaborations formed by the learner requiring effortful to do these. The process is inline with effort as an intentional process, which is in line with the concept of "desirable difficulty," which has been documented in many research papers like that of Bjork et al. (Bjork, 2020) which show that a certaine level of difficulty is required for and is conducive to learning (Bjork, 2020) When this hapens the process of elaboration is part of the encoding process

of learning. An example is when stiudents are asked to elaborate on a topic where thye anwer why and how of the topic, this process of intepratation leads connection of information and and enhancement of the schema development by connecting the new content to established content in long-term memory.

For example, a case of COVID-19 disease severity is associated with lack of oxygen referred to as hypoxia. When "how" and "why" are asked, the association of COVD 19 and hypoxia is made and the learner could then understand the mechanisms that contribute to the severity of disease include: which have been documneted as increased dead space ventilation secondary due to endothelial cell inflammation caused by covid 19 virus and microthrombi, with thickening leading to an increased diffusion barrier following alveolitis and pulmonary edema with right-to-left shunt formation secondary to atelectasis, which which are the long term complications of increased edema and fibrosis. The fact that students remember hypoxia easily as a a symptom of COVID-19 these process leads to develpment of schemas at much more logical levels through the process of elaboration.

Generation: This is similar to problem based learning PBL, where in this active learning method, the learner generates a solution to a problem given or definine a concept by themselves, this in contrast to having that information provided in a passive way like an overview or a lecture, This method has been proven to improve recall of the information. In this catgory, experiential learning has been considered a type of generative effects. This is due to the fact that students themselves are engaged in the experiemnt and are hands-on learning process, these approaches have been found to enhance achievement. The simple task like asking students to solve a problem before the class or attempting to solve a

challenge before it is completed in a teacher-led classroom are examples of the generation method, which improves learning outcomes. (Oakley, 2021 page 336)

This strategy has been applied in case presentation where the symptomatology of diseases are described based on the knowledge of basic sciences. An example is asking the student to generate the symptom of a patient injured or having a tuor growing in the mid brain based on acquired knowledge in anatomy and/or physiology of the central nervous system. This process has been shown to be more effective than just coming to lcass and listing the symptoms of a patient who a tumor growing in the mid brain.

Reflection: Reflection on the other hand is the intentional stopping and pausing to give the brain time to think, contemplateand digest or mediatae on the what is observed and experienced, with considerations of possible interpretations and synthesis of meaning and context. It is of a higher brain function order where metacognition, or thinking about thinking is utlized. This mental exercise is then used to be part of the learning process, stired in the mind and informs future mindsets and actions or paradyms. This process is an active process and requires effort from the learner, therefore, it is also categorized as active learning strategy.

This learning strategy is based on reflective models which are a group of lerning therories. These theories has been divided by Schön into reflection into “reflection on learning” and “reflection in learning”, the former being undertaken after learning occurs and the latter during the process of learning (Bennett, 1989). This active learning strategy, reflection on learning has been shown to support learners to find better approaches to study and understanding that knowledge they have just gained, while the other strategy, reflection in

learning is for educators who commonly use it to improve learning but this is done through facilitation of learners' reflection on their learning experiences (Mukhalalati, 2019)

There is adequate evidence to show that these instructional strategies are worthwhile and will be dicssued below, however, while these strategies place an empahasis on the learners role in their learning experience, the instructor is the one to plan and design using education scaffolds discussed above, elaboration, generation and reflection of tasks. The folliwng evidence outlined below supports the faculty implememntaion for active and innovative learners.

The following are the wide variety of strategies of active learning strategies that can be used to improve the students' own learning, although the one chosen are based on the course objectives, the following are the most commonly used active learning strategies: Simulations, flipped classroom approach, demonstrations, experiments, debates, role play, small group discussions, creating visual representations and models, problem solving, case studies, research and presentations, and games are all examples of active learning strategies. These strategies are widely employed in primary and secondary classes and in adult education and workplace training, however a larger list of strategies are listed below:

A taxonomy of active learning techniques.

Active learning techniques

Component/technique	Description
1. Audience response	Individual students respond to application of skill questions via an audience response system (ARS) or poll[34]
2. Vodcast + pause activities	A video podcast with pause activities, appended exercises, or practice questions
3. Vodcast + hyperlinks	A video podcast with no pause activities but includes hyperlinks to external or Web media for enrichment
4. Interactive vodcast	A vodcast that requires students to physically click through questions or interactivities. (vodcasts using Flash)
5. Interactive module	An electronic lesson, often audiovisual, that requires students to complete interactivities
6. Case-based instruction	The use of patient cases to stimulate discussion, questioning, problem solving, and reasoning on issues pertaining to the basic sciences and clinical disciplines[35]
7. Demonstration	A performance or explanation of a process, illustrated by examples, realia, observable action, specimens, etc[35]
8. Discussion or debate	Instructors facilitate a structured or informal discussion or debate

Active learning techniques

Component/technique	Description
9. Game	An instructional method requiring the learner to participate in a competitive activity with preset rules[36]
10. Flipped classroom	The traditional lecture and homework elements of a course are reversed. Short video lectures or electronic handouts are viewed by students before class. In-class time is devoted to exercises, projects, or discussions[24]
11. Interview or panel	Students interview standardized patients or experts to practice interviewing and history-taking skills
12. Learning station	Students rotate through learning stations, participating in performance exercises at each station
13. Worksheet or problem set	Learners work in pairs or teams to solve problems or categorize information. May be "peer-to-peer" (same training level) or "near-peer" (higher-level learner teaching lower-level learner)
14. CP Scheme	An interactive exercise that encourages learners to make clinical decisions following a clinical presentation scheme (flowchart)[37]
15. Simulation or role play	A method used to replace or amplify real patient encounters with scenarios designed to replicate real

Active learning techniques

Component/technique	Description
	health care situations, using lifelike mannequins, physical models, or standardized patients[37]
16. Oral presentation	Students present on topics to their peers. Professors and peers evaluate the presentations using a specific rubric
17. Team-based activity	A collaborative learning activity that fosters team discussion, thinking, or problem solving
18. POPS cases	A 4-part simulated case scenario wherein each student, working in a group of 4, has the solution to his or her part and must guide the others through a mutual solution
19. Problem-based learning	Working in peer groups, students identify what they already know, what they need to know, and how and where to access new information that may lead to the resolution of the problem
20. Lab or studio	Students apply knowledge in lab, by engaging in a hands-on or kinesthetic activity
21. Word activity	Students complete a word-based activity, such as a crossword puzzle, definitions activity, or memorization sequence

Active learning techniques

Component/technique	Description
22. Concept maps/drawings	Students generate concept maps, drawings, or graphics illustrating concepts
23. Annotations or notes	Students submit notes or annotations using a recommended style or platform such as *OneNote*
24. Formative quizzes	The lesson includes a set of questions bundled together into a quiz, which allows learners to self-assess
25. Technology-Enhanced Active Learning (TEAL)	An interactive lesson integrating educational technology, such as electronic games, mobile apps, virtual simulations, EHR, videoconferencing, Web exercises, or bioinstruments

Table 1: Taxonomy developed by the (ATSU-SOMA TEAL Team 2017)

Among these active learning methods is Flipped Classroom approach which requires further discussion as it one of the tested and tried methods with a lot of research findings.

Active learning approach is built on a pragmatic philosophy of nature of the learning processes. The philosophical beliefs and assumptions include concepts about; how learning occurs, roles of the teacher and the student, role of administrative support and the role of the environment. The origin of these methods can be traced to John Dewey where he held that students need to do something with the knowledge in order to really know it. Later on social cognitive constructivism based on the work of Piaget (1952) and Russian

philosopher Vygotsky. The ‘flipped-classroom’ (F L) concept is being used in all areas of education including higher education. This teaching technique targets the higher levels of Bloom’s Taxonomy. Flipped classroom can be particularly attractive to today’s student learners, often referred to as “Millennials,” or the “Next Generation” because the ability to access contents anywhere satisfies their preferences for immediate, portable access to information. This was the most suitable for residents who cannot be get adequate time for any form of training. In addition, the ‘Net’ generation tend to be experiential learners, preferring to be “doing” an activity rather than sitting through a lecture. They also desire to learn and work in environments where students are allowed to help each other. The flipped classroom model allows for increased classroom interaction that can include peer-to-peer activities.

A successful flipped-classroom model requires planning and accountability. A flipped class can help to avoid ‘content creep’ and promote student application of learned activities. Homework assignments need to be linked to some kind of assessment to increase chances of students completing the assignments schedules (Oblinger, 2005). The didactic educational format has limited opportunities for participants to practice and apply the concepts being taught (Mehta, 2013). The ‘flipped classroom’ allows learners to master new knowledge outside the classroom, while the classroom time is dedicated to interactive strategies for reinforcing learning (Mcdonald, 2013). Previous studies have already compared flipped classroom with traditional method showing better knowledge outcomes in histology (Cheng, 2017) physiology (Tune, 2001), dermatology (Fox, 2017), ophthalmology (Lin, 2017), EKG content (Rui, 2017), and surgery (Dominquez, 2015). Students’ satisfactions also seem to be better using the flipped classroom approach (Gilboy,

2015) (Pierce, 2012) (Ramnanan, 2017). More recently Granero et al 2018(Granero, 2018) found, quote ‘Comparing the two strategies, 'the Flipped Classroom’ was associated with better gains in knowledge and attitude, but not in the students’ skill, when compared with the traditional method. Likewise, students exposed to the FL intervention felt better prepared and more knowledgeable about caring for older patients.

The FL was evaluated more positively by students, who considered it more dynamic (Granero, 2018). A study by Luciana, B et al showed that giving bad news and responding with empathy improved significantly after FL training of residents in breaking bad news (Luciana B, 2019).

2.6 Assessment of competence in BBN

Assessment is the process of considering all the information about a situation or a person and making a judgement: in this study breaking bad news tasks. Formative assessment is used during the training process to assess learning and sometimes called assessment of learning and may lead to modification of instruction. The goal is to monitor student learning and provide feedback. It helps identifying the gaps training program and based on this feedback changes are made in future and expansion for training. Summative assessment is aimed at assessing the extent to which the most important outcomes at the end of the training have been reached. But it measures more: the effectiveness of learning, reactions on the instruction and the benefits on a long-term base. The long-term benefits can be determined by following students who attend your course, or test. This gives an idea of whether and how they use the learned knowledge, skills, and attitudes. Doctors’ professional competence in any skill, including breaking bad news tasks, is a continuum

that comprises dispositions such as cognitions and affect-motivations as well as situation-specific skills and performance. In this study, corresponding to the different aspects of teaching competence, different forms of assessment will be beneficial when it comes to assessing the outcomes of resident doctors learning processes.

In general, two different approaches to assessment can be distinguished: Summative assessment (SA) measures the achievement of previously defined standards, tasks or goals, encapsulating all collected evidence up to a given point to yield either comparative or numerical ratings (Taras, 2005). Formative assessment (FA), on the other hand, promotes individual development by interpreting and providing feedback according to a diagnostic judgment that presents information about the candidates' continuative learning processes. Unfortunately, many see the distinct purposes of these two forms of assessment as incompatible (Wiliam, 2010). But in our understanding of SA and FA, these two approaches can be combined and even be integrated to assess the development of professional teaching competence, because each assesses different aspects of competence. While SA considers dispositional aspects of competence (e.g., knowledge about study content and the prevalence of perceived opportunities to learn about different study content), FA focuses in on the contextual situatedness of the residents' professional actions and the development of situation-specific skills. When evaluating doctor education measures and the outcomes of learning, SA generally must play a role, since any educator assessment aims at least to certify that certain course planning and teaching skills have been acquired. During residents training however requires additional training to provide opportunities for cognitive learning as well as for the acquisition of situation-specific skills. In this study, therefore, SA covered doctors cognitive knowledge dispositions and the

theoretical learning opportunities provided by additional training. On the other hand, FA is often brought into play as a pragmatic option for the support of residents in their practice.

To concretize this study, a FA will yield information about residents practical learning opportunities during his or her training—in particular, the individual's acquisition of situation-specific skills in our case breaking bad news tasks. Further, the FA will provide information about our residents personal experiences with practical teaching, which we then might use, either to provide feedback, or adaptively for future seminar planning.

Methods of measuring competence can be grouped into, direct observation, psychometric measurement, peer group assessment.

Direct observation methods; Generally speaking, the purposes of evaluation fall into four categories: to gain insight, improve how things get done (Specifically Determine the extent to which plans were implemented Improve educational materials Enhance cultural competence), determine what the effects of the program are, and affect participants. The learning process for each learning module in the program was based on three steps: 1) preparation, including reading assignments, 2) application of knowledge, for example, case discussions, and 3) attending a workshop.

For direct observation methods a criteria must be set and made available to students as to what is to be observed, an assessment tool was developed and designed by consensus during a meeting of experts in (Fetzer Kalamazoo Michigan, 2004). The observation can be direct by a faculty member, recorded in the interview room and reviewed with the tutor, audio recording and reviewed with the tutor. The table below shows the items to be checked

in the assessment of competence in BBN. These items address the three aspects of competence, technical, attitudes and professional competencies and tabulated in the table 2.1. below.

Table 2 Bayer-Fetzer Kalamazoo consensus framework communication assessment tool

1. Builds a relationship
a. Greets and show interest in the patient as a person
b. Uses words that show care and concern throughout the interview
c. Uses tone, pace, eye contact and posture that shows care and concern
d. Responds explicitly to patient statements about ideas, feelings and values
2. Opens the discussion
a. Allows the patient to complete opening statement without interruption
b. Asks 'is there anything else' to elicit full set of concerns
c. Explains and or negotiates an agenda for the visit
d. Gathers information
e. Begins with a narrative using open ended questions (.'tell me about')
f. Clarifies details as necessary using yes or no questions
g. Summarizes and give patient opportunity to correct information
h. Transitions effectively to additional questions
3. Understands patient perspective
a. Asks about life events, circumstances, other people that affect health
b. Elicits patient belief, concerns and expectations about illness and treatment
c. Shares information
d. Assesses patients understanding of the problem and desire for more information
e. Explains using words that easy for the patient to understand
f. Asks if patient has questions

4. Reaches agreement
a. Includes patient in choices and decisions to the extent she/he desires
b. Checks for mutual understanding of diagnostic and/or treatment plans
c. Asks about patient's ability to follow diagnostic and/or treatment plans
d. Identifies additional resources as appropriate
e. Provides closure
f. Asks if the patient has questions, concerns, or other issues
g. Summarizes
h. Clarifies follow-up or contact arrangements
i. Acknowledges patient and closes interview

Notes: Ratings used: 1=poor; 2=fair; 3=good; 4=very good; 5=excellent.

Table 2 The Communication Checklist, Bayer-Fetzer Group on Physician–Patient Communication in Medical Education, May 2001. (Adapted from Essential Elements)

Indirect assessment using psychometric assessment: The most well developed and researched psychometric tools will be discussed in this section. The psychometric assessment tool to test technical competences is the self-efficacy scale developed to measure the effectiveness of training intervention using the SPIKES protocol.

The self-efficacy rating scale (Baile W. F., 2000) has been used in communication skills training in oncology as an instrument to measure physicians' self-efficacy beliefs related to their cancer-specific care skills (Baile W. F., 2000) (Liu, 2005) In relation to communication in oncology, there is evidence that self-efficacy is a significant factor in physician-patient interaction patterns should be taken into account in training programs for health care providers(Maguire P. , 1999). The use of a self-efficacy scale for the proposed study was chosen due to the fact that the SPIKES protocol, which will be utilized in this

study, applies a self-efficacy instrument to assess physicians' confidence in delivering bad news. The authors of the SPIKES protocol (Baile W. F., 2000) suggested that, based on their research over the last eight years, a self-efficacy scale consistently showed improvement in physicians' scores after skills training. The 23-item, 5-point Likert scale self-efficacy instrument addresses the confidence of the training participants in their ability to successfully manage skills that relate to delivering unfavorable news to cancer patients.

A total score is obtained by adding the scores of all items; higher scores demonstrate higher self-efficacy in communicating unpleasant news skills. This author recognizes that a possible increase in physicians' self-confidence scores will not necessarily represent acquisition of skills in delivering bad news or improved interpersonal communication in clinical practice. However, the literature on delivering unpleasant news and communicating in cancer care suggests that a higher self-efficacy assessment score can be associated with health care providers' behavior change (Cegala, 2002) (Hulsman, 1999).by (Baile et al., 2000).

Attitudes and professionalism is measured using Empathy scale and physician belief scales. Physician belief scale was developed by (Answorth et al., 1984) and designed to assess physicians' beliefs about the psychosocial characteristics of patient care. The PBS is a 32-item, self-report scale that determines a physician's position in terms of acceptance versus rejection of the psychosocial aspects of patient care (Appendix 4). This instrument uses a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Overall scores could range from 32, which represents maximum psychosocial orientation, to 160, which indicates minimum psychological orientation. Maximum scores is 160. Normed

scores are 72.1. The higher the score the worse the psychosocial orientation of the resident meaning that the resident does not think psychosocial issues of patients' is important.

The Jefferson Scale of Physician Empathy (JSPE) This was developed by Hojat et al. (Hojat M. G., 2002) and measures physicians' empathy in the context of patient care. The JSPE includes 20 items answered on a 7-point Likert scale (Appendix 5). The internal consistency of the JSPE's reliability was obtained by calculating Cronbach's coefficient alpha and reported 0.89 for the sample of medical students and 0.87 for the sample of residents.

2.7 Sociodemographic characteristics and perceived competence in BBN.

Having looked how perceived competence is attained by residents doctors and how it is measured in clinical practice, this section now focuses on the sociodemographic factors that affect perceived competence in BBN. Among the sociodemographic features to be discussed related to the objectives of this study include gender, additional specific training in BBN, level of training or experience, medical specialty.

Additional training and perceived competence: Studies seem to show that healthcare providers including doctors demonstrate a lack of skills that would help patients disclose their psychosocial problems in their illness(Silverman, 2005)(Stewart M. , 2003).Studies shows that some patients develop anxiety and depression and further that more than 50% are not detected and treated.

Maguire asserted that lack of training in communication skills and physicians' fears about patients' emotional reactions to their diagnosis and treatment contribute to the inability of

physicians to address these problems. There needs to be efforts made to provide physician managing cancer patients opportunities to get the relevant skills. This compounded by the fact that very few clinicians have been trained formally, or even informally, some use communication techniques which undermine patient trust and satisfaction which include giving the bad news bluntly in a detached and mechanistic manner, creating false hopes through use of excessive optimism, withholding adverse information, such as a poor prognosis from the patient, and giving the family information but not the patient(Back A. L.-E., 2003).Patients with cancer and other life threatening diseases experiences many things during their journey which include: physical, psychological, social, occupational, and emotional problems at various stages the disease(Kurtz, 2005).Research shows that breaking bad news well determines the long-term adjustment of patients with cancer(Maguire P. , 1999)(Brown J. B., 1999). Many healthcare organizations provide communication skills training for their clinicians in order to improve patient care. Most patients' problems with cancer are not resolvable but having an opportunity to express these concerns helps them in the coping with whatever challenges they be facing.

The training appropriate for perceived competence must be specific for breaking bad news. To contrast the distinctive features of a breaking bad news is now analyzed. Breaking bad news communication especially in cancer setting is associated with a lot of distress and serious emotional reactions, including sadness, feelings of insecurity, and loss of control over one's life (Maguire P. , 1999). Buckman et al (Buckman, How to break bad news- A guide for Healthcare Proffessionals., 1992) have articulated these responses in the following sequence: (a) shock or disbelief upon learning about the diagnosis; (b) anxiety; (c) anger; (d) depression and/or despair, and (e) gradual adaptation to and acceptance of

illness, this is unlike the normal communication where the effects of the message are not as drastic. Empathizing with a patient involves making a connection with him or her and experiencing his or her emotions as an extension of your own and communicating an understanding of his or her position and feelings. This is the other unique feature of breaking bad news. Communication on the other hand is giving, receiving, or exchanging ideas, information, signals, or messages through appropriate media, enabling individuals or groups to persuade, to seek information, to give information or to express emotions. Empathy and emotions play a minimal role in this kind of communication. This differs with breaking bad news in the message and the effect it has on the recipient. The recipient may respond by being distressed and losing control while in general communications, discussions are made. Doctors should identify and address emotional responses. Patients may express shock, denial, sadness, frustration, fear or anger; each of these emotions deserves attention and clinicians should recognize and validate the patient's feelings as best as he or she can. Categorizing issues into manageable worries can chop up overwhelming distress. These skills are both cognitive and affective domains in learning. This informed the choice of the instruments to include both domains.

Researched and documented models of BBN are now discussed as this forms part of the specific training in BBN. Nondisclosure; This was the traditional model particularly used in the case of cancer, presumably because of the fear and anxiety the disease uniquely generates (Kolb, 1984) Three basic assumptions underlie this model that it is appropriate for the doctor to decide what is best for the patient without reference to him/her; that patients do not want to know bad news; and that patients need to be protected from bad news (Andiko, 1990) The literature does not support these assumptions. Research indicates

that doctors are in fact poor predictors of patient's wants'; that most patients want to know as much as possible about their illnesses including cause, treatment, and prognosis(Stel, 2009)(Storti)and that they usually want to know more than the doctors are prepared to tell and that uncertainty is often a major cause of emotional distress. Speed of managing patients with cancer has undergone significant and fast-paced modification. This change has led to more frank and honest interchanges with patients, even including discussion about life expectancy, treatment options, and other more personal psychological topics (Bozcuk, 2001) (Ozdogan, 2004) (Surbone, 2004)

Full Disclosure: This model, which involves giving full information to every patient as soon as it is known, is also based on a number of assumptions, including that the patient has a right to full information, that all patients want to know bad news about themselves, and that it is appropriate for patients to make their own decision, since they have to live with the consequences. The full-disclosure model is often a paternalistic approach, since it takes no account of the patient's desires about the timing and amount of information disclosed. Although the literature indicates that many patients want to know their diagnosis, treatment, and prognosis, some patients will not want a detailed disclosure of this information. Denial is used as a coping strategy by some patients. Hence, the doctor may be denying patients this way of coping by telling them more than they want to hear (Aitken-Swan, 1959).

Individualized Disclosure: This model involves tailoring of the amount and rate of disclosure to the desires of the individual patient through negotiation between the doctor and the patient. The model implies a level of mutual trust and communication, which takes

time and work to develop (Mathews, 1986) with decision making involving both parties. The approach is based on the assumptions that people are different in the amount of information they want and in their methods of coping, that time is needed to absorb and adjust to bad news, and that a partnership relationship between the doctor and patient is in the best interests of the patient. (Donovan, 1990)

Gender and perceived competence has been a subject of research, however no consensus has been reached as to whether gender plays a role or not. This section looks at literature relating to this issue . (Baron-Cohen, 2004) (Davis MH, 1991) (Derntl, 2010) (Bjorklund, 2003) 8 (Rueckert, 2011;)'Boys will be boys', and 'girls are emotional and sensitive', 'men don't cry, women do' are the most noticeable gender stereotypes in routine lifetyle which have created and perpetuated the notion that women are more empathetic and caring than men. The term gender is used in studies to refer to attitudes, feelings and behaviors that are associated with a persons' biological sex. Studies done have supported this view, however these studies have been obtained through self-reported empathy questionnaires. (Baron-Cohen, 2004) (Davis MH, 1991) These studies may have been biased due to gender relevant social expectations similarly other studies from self-administered measures have motivated the view that women are more care-oriented than men in moral reasoning [8,]. In relevant experimental tasks these differences is absent as shown by Rueckert et al. (2011) so while this evidence seems to reveal sex differences in both empathy and moral judgment, it stems from instruments likely to bias responses towards gender-role stereotypes (Derntl, 2010) and physiological measures (Bjorklund, 2003) Other previous studies like Rueckert (2011) have yielded mixed results in sex differences in empathy and this such differences are stronger when empathy is measured with self-report

questionnaires. Sex differences favoring women have also observed through tasks where feelings of sympathy towards specific targets . This different from the one of empathy where there is no sex difference in experimental assessment or physiological assessment.

This, sex differences in empathy has been shown to vary dramatically depending on the method of assessment. Such inconsistencies have been further fueled by other factors. For instance, available results stem from relatively small samples and no population-based studies have been performed where stereotypical feminine role, women could be more willing than males to portray themselves as empathic, even if empathic responsiveness were similar for both groups Supporting this notion, reports on stereotypes (Rueckert, 2011;)show that both women and men endorse the generalizations that the former are more 'sensitive to the feelings of others' and have more 'emotional insight than men'. Since empathy has been shown to affect competence in self-reported questionnaires it thought that gender will be an important determinant of competence in BBN both in terms of the gender stereotype and also sympathy.

Level of training or experience, medical specialty. In a study done by Ford and Fallowfield (Ford S. &., 1999) oncologists, in general, conveyed only the most objective description of the bad news diagnosis, while avoiding its emotional impact. Cantwell and Ramirez (Cantwell, 1997) discovered that less experienced physicians in several hospitals in London, UK complained of a lack of ability related to the personal and emotional side of giving a bad news diagnosis and, therefore, had little interaction with their patients from a psychological perspective. They made every attempt to avoid difficult moments simply because they did not have a comfort level in dealing with the emotional component.

Clinicians often fail to recognize the patient's emotional trauma that can be related to receiving a "bad news" diagnosis. This was true even when patients reported their satisfaction with their physician during the communication process (Baile W. F., 2000). Ford and associates (Ford S. &., 1999) revealed that only 20% of oncologists were unable to quantify the level of patient discomfort during a medical visit.

Interestingly, these results were directly opposite of the physician oncologist's self-assessment. These physicians tended to rank their performance much more positively than did their patients. These results seem to indicate an inability on the part of the physician to correctly assess his or her own communication skills. It also demonstrates the need to rely more on the patient and the patient's family not only for accurate and helpful feedback, but also to treat the patient better clinically and emotionally (Rogers, 2000). These findings were confirmed by Takayama, Yamazaki, and Katsumata (Takayama, 2001). In addition, increased training and education in communication skills lessens the chance of physicians tiring of their occupation (Ramirez, 1995). When 100 cancer patients were studied six months after their cancer surgery, for those who showed positive improvement in their condition, their improvement was directly related to their interpersonal relationship with their physician throughout the process (Roberts, 1994). This research demonstrated the importance of the physician's compassion toward the patient's emotional needs, as opposed to only giving a straight forward medical diagnosis. In a similar study it was determined that cancer patients who believed that their physician was not a good communicator during their original cancer diagnosis phase were much more likely to suffer from anxiety or depression than those who had a closer communicative relationship with their oncologist (Ford S. F., 1994). Patient behavior in the form of making relevant

decisions is also impacted by physician-patient communication. Those patients who understand their illness tend to make more objective decisions based on their condition. In one study, cancer patients frequently overrated their survival chances based on communication with their physicians when that communication was less than adequate. It was determined that these patients expired more quickly during life-saving resuscitation (Weeks, 1998). Ultimately, quality communication between the physician and the patient can provide the patient with a more optimistic attitude. This positive attitude may improve treatment outcomes (Weinrich, 2003). Therefore, education that can promote oncologists' improved communication ability is a positive contributor to all involved parties (Hak, 2000).

The current study has no oncologists however we have different levels of experience form those in year 1 to those completing their post graduate training after 5 years and thos coming for post graduate training in oncology. These variables were expected to influence perceived competence in BBN.

2.8 Perceived constraining factors

Constraints are factors that directly or indirectly affect performance of certain tasks, these constraints can be expected to influence competence in BBN. This section looks at constraints documented in literature and later the most probable constraints will be highlighted which were expected to be found in the current study.

There are essentially three general types of constraints: resource constraints (demand exceeds capacity),policy constraints (productive capacity is limited by formal or informal

rules), and market constraints (capacity exceeds demand) (Watson, 2007).A policy constraint is a formal or informal rule, such as an operating policy, practice, or measurement, which reduces the system's performance(Ronen, 2012) by limiting the system's productive capacity(Watson, 2007). For instance, since people tend to behave according to the way in which they are measured (Goldratt, 2010), a measurement that incentivizes people to seek local optima (sub optimization) rather than global optima is a policy constraint that inhibits the system from achieving its global goal. Additionally, a rule that historically may have been appropriate may turn into a constraint when the environment changes (Ronen, 2012). This includes models of breaking bad news e.g., non-disclosure is easy and comfortable for the doctors however for improved care there is need to move to full disclosure. This transition becomes a policy constraint. Several authors have argued that policy constraints are the most common form of constraints, and that most resource constraints are in fact created by policy constraints (Motwani, 1996)(Rahman, 1998).

2.8.1 Lack of Formal Training

The first and perhaps the most important barrier is doctors' lack of training in communication skills. (Epstein, 1993) found that most clinicians have had little formal training in communication skills. Doctors tend to rely on their intuition and experience, and contrary to the research evidence which shows that communication skills do not reliably improve with experience; there is an assumption that communication skills will be acquired with time. (Fallowfield L. L., 1998) stated that too many of our doctors are forced to rely on intuition to guide them as to what to say or how to say things to patients. Doctors should

also be prepared to invest time when delivering the news to minimize problems later. As professionals, they must take responsibility for BBN tasks.

BBN tasks should start at medical school. This can provide only theoretical and at best role-playing models. The adoption of the Problem- Based Learning (PBL) approach for undergraduate education emphasizes the importance of developing many generic skills including communication skills. Further knowledge can be gained at the early stages of the medical career by observing senior colleagues delivering bad news.

2.8.2 Time Constraints

Although some doctors are better at managing their time more effectively than others, there is no doubt that hospital doctors generally work under considerable pressure as far as time is concerned. Doctors will need to prioritize these tasks and so it is not surprising that more pressing clinical situations often take priority over communication issues with patients and relatives.

2.8.3 Language Competence

BBN tasks are usually done face to face and hence it is vital for the doctor to speak in a language understood by the patient. This can be a problem especially in African with many ethnic groups having different languages and can be a big cause of inability to perform in BBN tasks.

2.8.4 Organization Related Constraints

This is related to the position the hospital takes in terms of sense of worth and value among all members of staff including doctors. (Cooke, 2000) found that if the hospital does not adopt an open system the first casualty, is communication among staff and patients.

2.8.5 Patient Factors

Hospital doctors have to respond to the differing needs of a hugely diverse range of patients and relatives. Patients and relatives have different backgrounds, cultures, religions, languages, levels of intelligence, and ages. These variations put demands on doctors to adjust the manner of delivering bad news accordingly, which may influence the doctors' ability to effectively deliver the bad news. In some cultures, it is believed that disclosure of bad news may cause patients to lose hope. In most of these cases, family members will act as bearers of the bad news. Whether the news is then communicated between the family members and the patient is another variation. Physicians in these cultures may be more likely to follow family wishes. Campbell (Campbell L. M., 2013) found that participants experienced four dilemmas with regard to telling bad news: when families did not want to be told any bad news; when participants felt uncomfortable about telling bad news; when participants and patients shared dissimilar values about telling bad news; and when participants were unsure about when to tell bad news. The focal issue here is that families did not want to be told bad news and the same is likely to be true in the Kenyan situation. Another study done in South Africa (Vangu, 2010) found that the majority of participants in that study supported the right of patients to disclosure, while the vast majority also felt that doctors have a duty to inform patients of their condition. There was, however, a

significant percentage of participants who felt that the information given to them was not satisfactory, even when they had requested more. This implies that there is a need to look at the way information is given to our patients and finds ways to improve it.

Specific additional training will be expected to be a be contributory factor in perceived competence with those with additional training expected perceive themselves more competence than those without any additional training. Time constraints was expected to be an important factor in perceived competence as the resident doctors are the primary doctors on call in the hospital. Language is not expected to be a constraints in this study as the selection criteria are those doctors who were trained in any medical school in Kenya where Kiswahili language competence is mandatory to do medicine. All patients are expected to be understand Kiswahili language in Kenya. Finally hospital and patient factors are not expected to contribute in any way in perceived competence in BBN.

2.9 Culture and competence in BBN

One popular belief across the African continent is the active power of speaking: Merely talking about a bad outcome may prompt its occurrence (Blier, 1996). This belief is so strong that in some societies simply talking about death in general is taboo (Beyene, 1992). Studies have shown that physicians in the former Eastern Bloc countries (Bulgaria, Czech Republic, Poland, Yugoslavia), then under Soviet rule, have approached patients diagnosed with cancer very obtusely, i.e., they hide the truth from the patient (Surbone, 2004). Until recently, this nondisclosure approach was also in practice in Greece, although recent research has demonstrated that physicians in that country are now being more forthcoming with their patients (Mustakidou, 2005). (Gordon & Paci, 1997) asserted that “non-

disclosure of diagnosis of cancer has been challenged" and an increasing number of patients are informed and less passive about their options and the decision- making process. In contrast, Studies in Turkey shows oncologists demonstrated a lack of skills in delivering bad news and involving patients in decision-making; however, patients do not have expectations of such behavior (Buken, 2003). Studies in the African set up done in Togo show, Togolese 33% preferred that the physician tell the full truth to the relatives but not as much information to the patient, and 42% preferred that the physician tell the full truth to the relatives only (Asante, 2009). This closely approaches the nondisclosure model. Most African cultures do not promote individual autonomy, but instead consider the community 'collective relatedness, interdependence, and communality' to be the essential source of meaning and the main frame of action for an individual (Brown L. M., 2004) (Hallen, 2009). For health communication, the family group, in particular, is primary (Beyene, 1992) (Harris, 2003) Furthermore, African systems of thought are rich with supernatural forces that do not create boundaries between the material and the nonmaterial spheres (Brown L. M., 2004).

Within the historically closed societies, such as Turkey, for instance, a physician is generally unable to find training to improve his or her ability in communicating with a patient. (Buken, 2003) also identified some interesting attitudinal approaches of physicians in Turkey and cites several characteristically negative approaches of physicians who treat patients diagnosed with cancer. The first of these negative approaches was the doctor who makes every attempt to prevent the demise of the patient. In a sense, this physician was ruling out the possibility of death. The second negative approach was characterized by the physician who separates his actions from the emotionally charged situation primarily

because he or she does not wish to deal with some of the more intimate and emotional aspects of the care-giving process. Buken simply stated that “some physicians may lack the energy required for this effort” (Buken, 2003). Both approaches seemed justified by the physician who, believed that if the patient is informed completely about his or her condition, then he or she may not be emotionally equipped to deal with the situation; therefore, this emotional response may result in a less positive outcome. The conclusions of this study support findings in other countries, such as Italy, Greece, and Japan, about dilemmas that physicians may experience while treating patients with cancer. Cultural differences and legal regulations may impose additional difficulties in the process of interaction with patients in the field of oncology (Gordon, 1997)(Mustakidou, 2005)(Takayama, 2001).

Despite the amount of literature detailing the benefits of effective (Maguire P. , 1999) communication skills and BBN tasks, most doctors who are well versed with various conditions, leave these important tasks to be instinctive. Withholding bad news has been the practiced until recently in the developed countries and could still be the practice in many African countries including Kenya. Hippocrates then had recommended that physician should be leery of passing breaking bad news as the patient may “take turn for the worst”. In the African set up breaking bad news is delegated to the inexperienced doctors or the nurses who are perceived to have interacted with the patients more and have developed close relationship. In most African countries, BBN is given to the relatives, and they are left to decide how much and what to tell the patient. Ineffectiveness in BBN is becoming easily recognizable due to the easy access by most patients to Internet and frequent complaints by patients about inadequate information.

2.10 The conceptual framework

The conceptual framework of this study was informed by the variable in the study. Training, self-efficacy, empathy, constraints and physician beliefs were core variables in this study. Competence in breaking bad news tasks was comprehensively assessed in the light of their previous training, their current levels of self-efficacy, empathy and their attitudes and the context in order to ascertain any constraining factors that may inhibit performance of breaking bad news. In essence, this study was an evaluation of training of doctors in breaking bad news tasks. Bearing in mind this crucial factor the study adopted the Input-Process-Outcome (IPO) model developed by (Bushnell, 1990). The IPO model is considered a systems-based approach predominantly used in critical evaluation of training from development through delivery and impact (Bushnell 1990, Eseryel 2002). This model allows for assessment at four levels, all done concurrently. Any factors that might impede the successful implementation of training are also reviewed. Level one, an exploration of program indicators before the training are evaluated. These include the trainers characteristics, instructional resources, and instructional content. In the context of this study, this was achieved by examining courses in the senate approved MBCHB and Kenya Medical Practitioners and Dentists council core curriculum that are relevant in preparing doctors in breaking bad news tasks. Trainers background was also examined to see if they had prior formal training in breaking bad news tasks. Level two, the actual training process is evaluated. The training methods and modes are useful in archiving this purpose. Level three the output the evaluation looked at the feedback mechanisms which included the trainees reactions knowledge and skills attained during the training. This was archived by using an assessment tool developed by Baile et al. which encompasses,

relationship building, opening discussions, gathering information, shares information, reaches agreement and provides closure, Jefferson's scale for physician empathy and physician belief scale for the understanding patients' perspectives. At the outcome level constraints and effectiveness of additional training.

Figure 2. below illustrates the IPO model as it relates to variable in this study. It is worth noting that feedback loops at all phases means that the findings should be able to generate conclusions and recommendations that will be significant for curriculum developers, trainers and other professionals in medical education who stakeholders in various levels. performance of breaking bad news tasks by doctors. The need for breaking bad news tasks in medical profession cannot be overemphasized and opportunities are there for every patient presenting with cancer and other bad diagnoses. The extent to which residents are equipped with the skills to do this important task is another question altogether, as it seems that many are not adequately prepared. Training opportunities for residents to gain skills to perform breaking bad news tasks do exist, with nature mode and content among different institutions varying to a certain degree. Training using guidelines have been documented in oncologists however this has not been done in resident doctors. Certain barriers have been identified in literature, which work against the effective execution of breaking bad news tasks. These barriers can be personal, organizational or administrative. In conclusion, the conceptualization of the variables in this study has been described in detail.

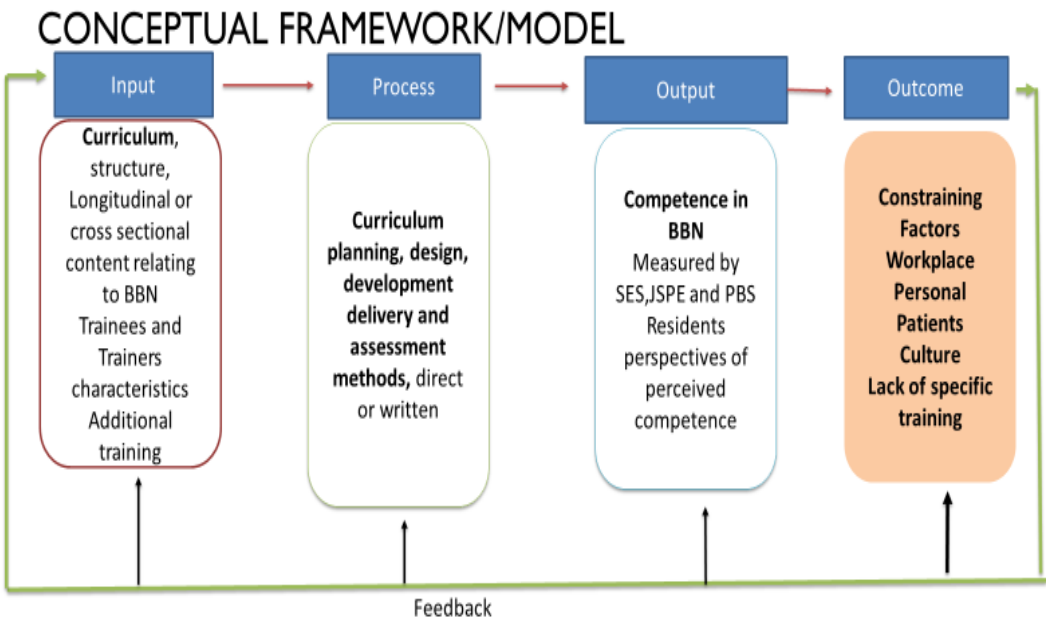


Figure 2: Conceptual framework adapted from Bushnell's (1990) IPO model

CHAPTER THREE

3.0 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter looks at the study design and study methods that were used in order to archive the objectives of this study. It describes the philosophical orientation, research methods, research design, the area of study, the target population; the sample and sampling techniques; data collection instruments; validity and reliability of the instruments; data collection procedures and methodologies and data analysis procedures.

3.2 Research design

3.2.1 Research Approach

The study adopted mixed method approach, (Tashakkori, 2003) identifies three different approaches to mixed methodology; concurrent, sequential and conversion. This study utilized sequential approach where the quantitative phase was followed by the qualitative phase (personal experience) (Creswell, 2007); where the qualitative findings are used to contextualise the quantitative data (Creswell, 2007).Qualitative data can also enhance and enrich the findings and, help generate new knowledge.

3.2.2 Research Design

More than one type of research design was used to achieve the purpose of the study. The cross-sectional design was utilized, often called a survey design, and causal comparative design research designs were utilized.

3.2.2.1 Surveys

In surveys research knowledgeable participants provide information from their own experience that is directly relevant to issues of interest to the researcher (Young, 2010). (Ayiro, 2010) cites Fink (2002) who has identified four types of data collection procedures used in surveys; self-administered questionnaires, interviews, structured document reviews to collect financial data, medical or school information and structured observations. This study adopted a survey design in that questionnaires, interviews and document analysis were utilized to generate information that would describe existing factors pertaining to training needs, constraints, and perceived competence of residents in breaking bad news.

3.2.2.2 Causal comparative design

In causal comparative design the study examines conditions that already exists, with an attempt to determine reasons or causes for pre-existing differences in a group of individuals. It is also referred to as 'ex post facto' (Latin for 'after the fact') since both the effect and the alleged cause have already occurred and must be studied in retrospect. In this kind of research, the inferences are made concerning the relationships among variables without directs control of the independent variables. According to (Kothari, 2004), the design allows the researcher to collect data about one or more variables from participants and then compare that data. The independent variables are not available for manipulation. For example, it is not possible to experimentally manipulate the age of the respondents. The designs attempt to identify a causative relationship between independent and dependent variable. The researcher went into the field to examine breaking bad news by residents. The researcher had no control over the characteristics of the residents' characteristics like gender, age or duration of practice as a medical office in MTRH.

Neither did the researcher have any intention of manipulating these characteristics. All these variables under investigations were factors already existing prior to conducting the research. Survey was carried out specifically cross-sectional descriptive design was used where the participants provide information from their own experience that is directly relevant to the researcher (Young, 2010). Data collection in this was done using self-administered questionnaires and document analysis were utilized to generate information that would describe existing factors pertaining to training needs and perceived competence.

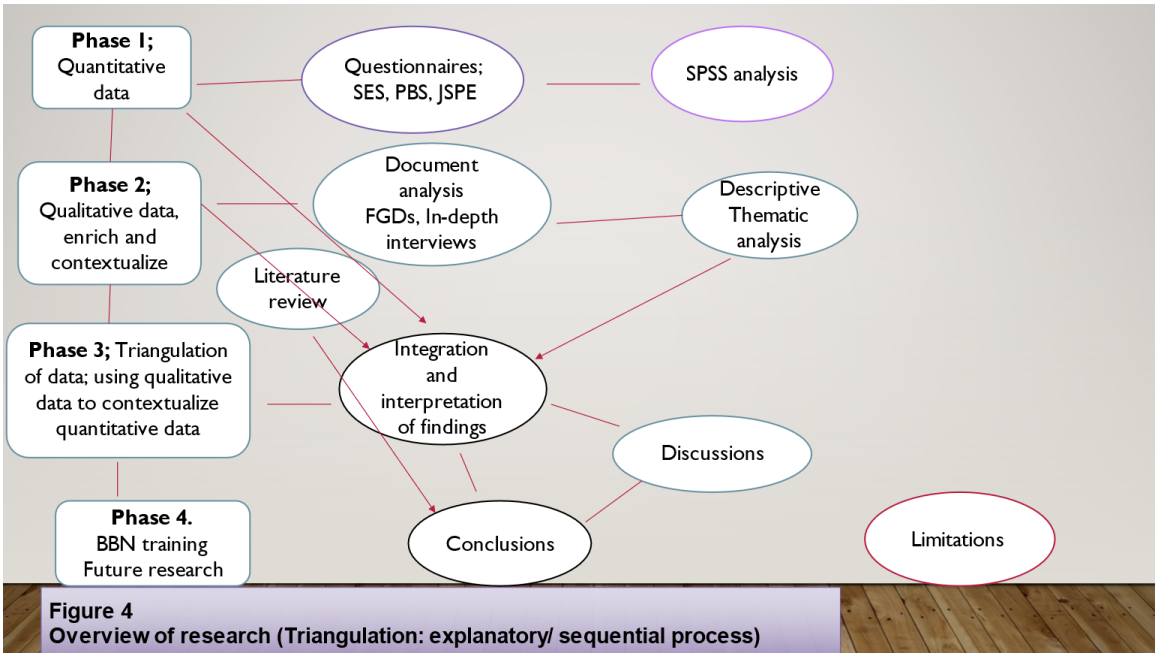


Figure 3: Diagrammatic representation of the study design (Chumba 2021)

3.3 Geographical location of the study

The study was done in MTRH in Eldoret Uasin Gishu County. Eldoret town is located about 300 km Northwest of Nairobi on the Trans-African Highway and 65 Km north of the Equator. Currently it is the 5th largest city in Kenya (Machine, 2012). Considered as farm town, Eldoret hosts a host of tertiary and middle level colleges and universities, including

Moi Teaching and Referral Hospital, Moi University School of Medicine, and Kenya Medical Training College Eldoret Campus.

Moi Teaching and Referral Hospital is both teaching and Referral hospital whose core services include specialized clinical services (MTRH, 2018). It is appropriate place for the study for several reasons: It is the second largest Referral hospital in Kenya after KNH; this carries doctors of various backgrounds, which will be representative sample for the study. A training workshop for residents was held at the new PDN Hall (003) where senators usually sit during senate sessions and this room has comfortable sitting arrangement that are suitable for both large and small group activities and food and drinks were provided by the researcher. Ten o'clock tea, lunch and 4 o'clock tea was served. The workshop was scheduled on a Saturday 10th June 2017, this was to allow the residents time as they were on a weekend. Facilitator: Jane Kariuki; Director Mental Health and Rehabilitation Services in Moi Teaching and Referral Hospital.

3.4 Research study population

Research population can be defined as universe of units from which a sample is to be selected, consisting of all the variables the investigator wishes to measure (Gurmu, 2011).

3.4.2 Quantitative data

The study population were residents doing their residency programs in Moi University School of Medicine.

3.4.2.1 Inclusion criteria

Registrars, doctors on training who were trained in their undergraduate in any of the five schools of medicine in Kenya and were willing to participate in the study.

3.4.2.2 Exclusion criteria

Those who trained in other countries and those who were no interested in the study

3.4.3 Qualitative data

The study population were the following **1**. documents: Moi University senate approved MBCHB curriculum, Kenya Medical practitioners and dentist council core curriculum. **2**. Faculty teaching human communication skills in Moi University and Moi Teaching and Referral Hospital and **3**. Two groups of residents selected for focus group discussions comprising of a total of seven residents.

3.5 Sample and sampling techniques

A sample is the segment selected for investigation from a population is called a sample according to (Gurmu, 2011) and the sampling is the process selecting a subset of individuals within a population to be involved in data collection for the study. Data from this group can then be used to make statistical or qualitative inferences to make predictions about the whole population. Element in the population having similar features to the underlying population, sampled and used to make certain observations (Kothari, 2004).

3.5.1 Quantitative data Sampling

Purposive sampling was used to select 80 residents from a population of 240 residents who were doing their master in Moi University School of Medicine at the time. Purposive sampling was used as it is an acceptable kind of sampling for special situations. It uses the judgment of an expert in selecting cases or it selects cases with a specific purpose in mind. One principle for sample sizes is (California, 2017), the smaller the population, the bigger the sampling ratio has to be for an accurate sample. Larger populations permit smaller

sampling ratios for equally good samples. This is because as the population size grows, the returns in accuracy for sample size shrink. For small populations (under 1,000), a researcher needs a large sampling ratio (about 30%). To achieve the objectives of this study a purposive sample of 80 physicians 30% of the population who are residents and provide treatment for patients with various disease in their specialties. Calculation of sample size for cross sectional studies is as follows:

$$\text{Sample size} = \frac{Z_{1-\alpha/2}{}^2 SD^2}{d^2}$$

1.96 and SD is 22 in the Nigerian study

This comes to sample size of 80 (Biswas., 2013)

3.5.2 Qualitative data Sampling

Purposive sampling procedures were used to select seven residents from three departments two of them with additional training (N=7) who were interviewed along the themes represented by the objectives on sufficiency of the communication skills training in breaking bad news tasks.

Additionally, purposive sampling was employed to identify three lecturers who teach communication skills were selected to provide further information on training needs. These were faculty who deliver content in behavioral sciences and related subjects. The selection was purposive sampling (N=3). The questions were mainly on the teaching methods and content while constraints were addressed to the residents.

Documents were selected purposively first the Kenya medical practitioners and dentists council core curriculum which is the basic document used in all medical schools to adopt and or develop MBCHB curriculum and Moi University senate approved MBCHB curriculum 2010.

3.6 Data collection instruments

3.6.1 Quantitative data collecting instruments.

Data was collected using self-administered questionnaires comprising of Self-efficacy questionnaires, Physicians belief Scale and Jeffersons Scale for Physician Empathy

3.6.1.1 Self-Efficacy scale:

The 23-item 5-point Likert scale self-efficacy instrument ranging from “strongly disagree” (1) to “strongly agree” (5), addresses the confidence of the training participants in their ability to successfully manage skills that relate to delivering bad news to cancer patients (Appendix 3). This instrument was developed by (Baile et al., 2000) as an assessment of SPIKES training with oncologists. A total score is obtained by adding the scores of all items; higher scores will indicate higher self-efficacy in communicating unpleasant news skills. Statistical properties of the Self-Efficacy scale are not provided by the developers of this instrument; however, the authors of the SPIKES protocol (Baile W. F., 2000) indicated that, based on their research over the last eight years, a self-efficacy scale consistently showed improvement in physicians’ scores after communication skills training.

3.6.1.2 The Physician Belief Scale (PBS)

Physician belief scale was developed by Ashworth, Williamson, and Montano (Answorth, 1984) and designed to assess physicians' beliefs about the psychosocial characteristics of patient care. The PBS is a 32-item, self-report scale that determines a physician's position in terms of acceptance versus rejection of the psychosocial aspects of patient care (Appendix 4). This instrument uses a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Overall scores could range from 32, which represents maximum psychosocial orientation, to 160, which indicates minimum psychological orientation. Maximum scores is 160. Normed scores are 72.1. The higher the score the worse the psychosocial orientation of the resident meaning that the resident does not think psychosocial issues of patients' is important.

3.6.1.3 The Jefferson Scale of Physician Empathy (JSPE)

This was developed by (Hojat et al., 2002) and measures physicians' empathy in the context of patient care. The JSPE includes 20 items answered on a 7-point Likert scale (Appendix 5). The internal consistency of the JSPE's reliability was obtained by calculating Cronbach's coefficient alpha and reported 0.89 for the sample of medical students and 0.87 for the sample of residents.

3.6.1.4 Rationale for selection of research instruments

The process of breaking bad news is highly emotional for both the patient and the doctor. A strictly medical model used in training doctors rarely emphasizes the importance of emotions, therefore physicians feel loss of control in such an emotional environment. Several approaches have been advocated for examining physician-patient communication

including as a bedside manner, friendlier-patient oriented approaches. A theoretical framework for physician-patient relationship has not been clearly articulated therefore there is no agreement among researchers and educators in the medical field in terms of teaching and evaluating strategies for physician-patient interactions (Stavropoulou, 2012). Kalamazoo I and II conferences which came up with basic guidelines that include relational factors, empathy and skills in medical interview.

Physician Belief Scale PBS, and The Jefferson Scale of Physician Empathy were selected based on the work of Duval and Wicklund in objective self-awareness theory which is being "in-tune" with yourself in relationship to others. (Duval, 1972). Empathy is a critical requirement and is in line with the fact that empathy is the single most robust evidence of humanitarian side of medicine Jefferson Scale of Physician Empathy was developed and validated by (JSPE, Hojat et al., 2002) score above 115 empathic. Self-efficacy scale incorporating the technical aspects developed by consensus was developed by Baile et al., 2000, was selected based on the work Bandura (Bandura, Self-efficacy: Towards a unifying theory of behavioral change., 1977) which posits that people are likely to engage in activities to the extent that they perceive themselves to be competent at those activities.

3.6.2 Qualitative data collecting instruments

Data for Qualitative data was collected using three instruments developed by the researcher based on review of the literature. Interviews guide, focus group discussion guide and documents analysis guide

3.6.2.1 Interview guides

The study used interview guides, also known as semi structured interviews, to obtain information from the lecturers who teach communication skills in Moi University. (Appendix 10a).

3.6.2.2 Document analysis

The most current curriculum documents concerned with training of doctors in breaking bad news communication were analyzed. A checklist containing the areas identified in literature as critical in training of doctors in breaking bad news communication was used. Analysis was done on the basis of content, modes of teaching, methodologies and relevance of breaking bad news tasks. A checklist containing the areas identified in literature as a critical in the training of doctors in breaking bad news tasks. (Appendix 8)

3.6.2.3 Focus group interviews

A focus group is a method of survey data collected in which a researcher brings together small group of people who were selected participants due their knowledge about the topic of interest (Young, 2010) This study identified two groups of residents to participate in the focus groups. One group had residents with two with additional training and one without (N=3) formed one group and the and four residents without additional training (N=4) form the other group. These two groups were interviewed to provide different perspectives along the themes represented by the objectives of the study in particular the sufficiency of breaking bad news training in medical school and constraining factors they encounter while performing breaking bad news tasks. (appendix 9b).

3.7 Validity and reliability test of the instruments

Validity is defined as extent to which a tests measures the construct or variable which it purports to measure (Lee, 2010). Lee contents that content validity is an appropriate method of establishing validity of a set of test seeking to ascertain performance. Content validity is the extent to which the measurement adequately samples the content domain.

A good way to establish content validity is consulting the professionals in that field. After adopting the SES, JSPE and PBS the researcher sought professional views from professional in communication skills including the supervisors, faculty in human communication. The questionnaires were adopted and customized locally by pretesting on a pilot study. The original validity as in where they were developed for JSPE's reliability was obtained by calculating Cronbach's coefficient alpha and reported 0.89 for the sample of medical students and 0.87 for the sample of residents (Hojat M. E., An operational measure of physicians lifelong: Its development, components and preliminary psychometric data, 2003).

Convergent validity was validated by higher correlations between empathy scores and relevant measures such as compassion ($r = 0.48$ for medical students, $r = 0.56$ for internal medicine residents)

Reliability, on the other hand, refers to the extent to which assessment are free from error, accurate and provide consistent results (Lee, 2010). Lee suggest the use of t test-retest reliability coefficient in ascertaining reliability. A t test-retest reliability coefficient is obtained by administering the same test on two different then correlating the scores obtained on each occasion. Lee further recommends the Pearson Product Moment

Correlation to calculate the reliability coefficient. In line with this, the researcher administered the test to a group of 10 doctors in Uasin Gishu District Hospital within the duration of one week. The correlation coefficient was calculated based on the two sets of scores obtained from this population. The correlation coefficient was Self-efficacy Scale 0.982; Physicians Belief Scale was, 0.935; Jefferson's Scale for Physician Empathy 0.626; Ashworth and colleagues (Answorth, 1984) reported a reliability coefficient of r = .88, which is an indication of high internal consistency of individual items on the PBS. The average item variance was reported at .86 and average inter-item correlation was .19. The PBS showed acceptable levels of reliability (Cronbach alpha = 0.78) in a study that explored physician-patient communication skills among European oncologists (Travado, 2005). Lee recommends that correlation values higher that .80 are sufficient to qualify the test as reliable. Based on this SES, JSPE and PBS were deemed reliable to test to be sued assess perceived competence in breaking bad news tasks.

The results of the pilot study showed that Cronbach's alpha for the Self-Efficacy Scale 0.982; Physicians Belief Scale was, 0.935; Jefferson's Scale for Physician Empathy, 0.626; There are different reports about the acceptable values of alpha, ranging from 0.70 to 0.95. A low value of alpha could be due to a low number of questions, poor interrelatedness between items or heterogeneous constructs. For example, if a low alpha is due to poor correlation between items, then some should be revised or discarded. This specifically applies to empathy which has cognitive, affective, and behavioral domains, which are not similar. Researcher's cautions about abandoning an instrument based on this Cronbach's alpha scores unless they grounded in the 'tau equivalent model' which assumes that each test item measures the same latent trait on the same scale. Therefore, if multiple

factors/traits underlie the items on a scale, as revealed by Factor Analysis, this assumption is violated and alpha underestimates the reliability of the test. (Green, 2010)

3.8 Data collection procedures

Approval for data collection was sort from Institutional Research Ethics Committee (IREC), at the CHS Moi University (Appendix 7).

3.8.1 Quantitative Data collecting procedures

The researcher make an initial contact with the resident in charges in department offering postgraduates studies in Moi University School of medicine to get information and seek appointments. The researcher trained a research assistant whose qualifications are: Bsc in Computer science and Msc in Epidemiology and Biostatistics; He was send to talk to the in- charges of residents from all the eight departments who have post graduate students. Resident doctors through their class representatives were first told about the research and the importance of having skills to break bad news to patients and the training that was to come up later “breaking bad news to patients” All who are interested signed up and were given consent, coded questionnaires which had consent and data collection instruments, on a first come first come basis. The department, mobile telephone number and e-mail address were taken at the time recruitment, this were written on a separate piece of paper that which was destroyed after the analysis of data. The researcher and his assistant then collected the questionnaires.

3.8.2 Qualitative Data Collection Procedures

Following the analysis of the quantitative data, a few issues arose requiring clarification. Among the issues were very high scores in self-efficacy and physician belief scale and low JSPE. One of the objectives was to review the curriculum and hence document analysis guide was used to collect important information of interest to the research objectives, the selected information was then coded initially using the conceptual framework IPO mode (Bushnell, 1990) and later themes were generated after further scrutiny of data to complete analysis. In order to address and confirm these findings, a purposive sample of 7 residents from 3 departments who had already filled the questionnaires were invited for a focus group discussions guided by a guide developed based on literature review and results of the quantitative data analysis. Further three lecturers for the purposes of in-depth interviews were purposive sampled based on their availability and knowledge in the teaching and assessment of communication skills including BBN. Two of them were employees of Moi University while one was an employee of MTRH. Individual interviews were done using the in-depth interview guide and audio recorded initially and later transferred to a field notebook for analysis.

It was envisaged that it would take 8 weeks including data analysis, but it took longer as at the point of starting the process there was an industrial action affecting all the residents which went for close to three months. After the questionnaires were received, cleaned and entered, the researcher conducted all the interviews with lecturers in communication skills and focus group interviews with the resident doctors. Some of the lecturers were out of the

country and we had to wait for him to come back. The whole exercise, including document analysis took a period of ten weeks to be completed.

3.9 Data analysis procedures

Data analysis is the process by which data is categorized, manipulated, and summarized in order to obtain answers to research questions (Gurmu, 2011). This being mixed methods research both qualitative and quantitative procedures were employed in data analysis.

3.9.1 Quantitative Data Analysis.

The data collected through questionnaires was checked for completeness by the researcher. Data was entered into a computerized database and later exported to Statical package for Social Sciences (SPSS) version 20 for analysis. Univariate analysis using frequency tables, measures of central tendency, mean and standard deviation. Bivariate analysis used to determine any relationship using t test for independent samples was used to compare the differences in means in competence, empathy, and physician belief scores along variable of gender, additional training, and level of training. Multivariate analysis was utilized to check for relationship between variables. This process was done to archive objectives 2 and 3. All the tests were considered significant at 95% confidence level. Data was presented in tables and figures.

3.9.2 Qualitative Data Analysis

All interviews were recorded initially on a recording device and transferred into a field notebook specifically bought for this process and refined by the researcher. Analysis began

as soon as possible after the interview. Analysis began with the listening and reading and re-reading of each transcript and a summary of each was generated. These summaries were compared and contrasted using a process of constant comparison (Lincoln, 1985). Codes were collapsed into categories, which were grouped together to examine and isolate meaningful patterns and processes, confirm associations between categories, and to derive specific themes. Thematic analysis is the process by which significant statements are identified and coded to identify patterns related to objectives of specific study (Jwan, 2010) The patterns that were related were grouped together into themes which later reported and interpretated. Similarly thematic analysis was performed on the information obtained from curriculum documents. This aided the researcher in interpreting information derived for documents and provided comparison with curricular for training doctors discussed extensively in literature review. Rigor for the study was ensured through addressing the components of credibility, auditability, and fittingness outlined by (Beanland, 1999).

Credibility was ensured through continual immersion in the data before and during analysis, both individually by the researcher and with the research assistant and constant consultation with the experts in communication skills training in the faculty at the school of medicine. An audit trail was maintained via summaries to show how data abstraction and reduction were conducted. Fittingness was achieved by discussing the findings in the light of other research studies in the area and by using the literature to support or refute the concepts emerging from the data during analysis through the use of a checklist which helped the researcher to identify points of convergence between curriculum discussed in literature and those of Moi University School of medicine and Kenya medical and Dentists council core curriculum. These were also reported as themes and interpreted accordingly.

3.10 Ethical considerations

Permit number FAN: IREC 1716 was obtained from Ethical approval to conduct the study were sought from the Institutional Research Ethics Committee (IREC) at the Moi Teaching and Referral Hospital/ Moi University School of Medicine on behalf of the National Commission of Science, Technology and Innovations (NACOSTI) (Appendix 6). Permission to conduct the study was obtained from the appropriate officers in the Sub-County and the County where the study was carried out.

Informed Consent was obtained from all participants (appendix 1) At the conclusion of the study, any information that could be used to link the respondents to the research data collected were destroyed. Only individuals who will have freely consented were allowed to participate in the study, and no one was be coerced to participate. Participants were also be informed that they had a right to withdraw at any point of participation in the study. Confidentiality and Anonymity: The identity and replies of respondents was confidential. Participant logs, the only link between identifying information and code numbers, and all data were kept in a locked file cabinet. Only the researcher had access to the files. The code books that link the participant's names with the code were destroyed once they were checked for accuracy.

CHAPTER FOUR

4.0 DATA ANALYSIS, PRESENTATION, AND INTERPRETATION

4.1 Introduction

This chapter reports the results of quantitative data analysis pertaining to the objectives of this study. The reporting of statistical results in this chapter follows a consistent pattern; a restatement of the research objective, after which pertinent descriptive statistics, inferential and appropriate interpretations are presented. Descriptive statistics is usually the first step in any statistical analyses regardless of simplicity or complexity. Descriptive statistics enables the reader to examine the characteristics of individual variables before looking at the results of inferential statistic(Gravetter F. J., 2011)It is important to note at this time that breaking bad news tasks are embodied in the three components namely, skills, attitude, and empathy. Each of these traits were measured and analysed separately using an instrument indicated above.

4.2 Analysis of demographic characteristics of respondents

The reporting of the results of quantitative data opens with a demographic description of participants who were involved in the data collection. The participants are described here by gender, department of origin and additional training if any.

Table 3: Demographic characteristics of the participants

Variable		Number	Percentage
Gender	Male	44	55
	Female	36	45
Department	Reproductive Health	15	18.8
	Orthopaedics	15	18.8
	Child health and paediatrics	14	17.5
	Internal medicine	10	12.5
	Family medicine	5	6.3
	Oncology	1	1.3
	Radiology	10	12.5
	General Surgery	10	12.5
Experience	Less than 5 years	79	
	More than 5 years	1	
Additional training	Yes	10	12.5
	None	55	68.5
	Observed	15	18.8

Participant	Experience in years	Highest level of training
1	More than 10	MSc Counselling psychology
2	More than 10	PhD human communication
3	More than 15	PhD human communication

Participant	Experience in yrs	Additional training	Qualifications

1	12	Yes	MBCHB, MMED
2	5	No	MBCHB
3	4	No	MBCHB
4	4	No	MBCHB
5	5	Yes	MBCHB
6	4	No	MBCHB
7	5	No	MBCHB

Documents

Kenya medical practitioners and dentists core curriculum	Current (not dated)
Moi University Senate Approved MBCHB curriculum	Approved 2011

Table 3 shows demographic characteristics of residents, lecturers and documents analysed; A total of 80 participants were recruited for the study. Reproductive health students were 15 (18.8%), orthopaedics was 15 (18.8%), paediatrics were 14 (17.5%), radiology 10 (12.5%), Internal medicine 10 (12.5%), family medicine 5 (6.3%) and reproductive health oncology 1 (1.3%). There were more men than women male 44 (55%) and female 36 (45%). All except 1 of the participants had worked below five years after graduation. The mean age of the participants was 37.4 years.

Residents for focus groups discussions (FGDs) were divided into two groups for focus group discussions, one consisting of four residents with no additional training and the other with three residents, two of whom, with additional training in breaking bad news tasks. To

examine the course content and methodologies utilized in training doctors to break bad news against international consensus statement on content and methodologies.

Individual interviews, focus groups discussions and document analysis were conducted at Moi University School of Medicine, of the three lecturers two were male and one was female. Three of the resident doctors were female and 4 were males.

One of the objectives of this study was to examine the course content and methodologies utilized in training doctors to be competent in breaking bad news, archive this objective, two methods of data analysis were used; document analysis of MBCHB senate approved curriculum of Moi University and MBCHB core curriculum form the Kenya Medical Practitioners and Dentists council and oral interviews with the lecturers who teach breaking bad news tasks in Moi University school of Medicine. (Appendix 8) shows the document analysis guide that contains the key content areas that have been utilized in the training of doctors in breaking bad news tasks in medicine.

4.3 Analysis of the participants responses on objective 1

Objective number 1. 'To determine residents' perception of their competence in performing Breaking Bad News tasks'. To archive this objective, self-efficacy questionnaire, Jefferson's scale for physician empathy, physician beliefs scale, focus groups discussions with residents and specific questions were asked relating to their training, level of ability to break bad news and how comfortable they felt when breaking bad news. The findings of the analysis of the three aspects of competence is tabulated in the **tables 4, 5 and 6.** below.

Table 4: Aspects of competence: Self-Efficacy scores by departments and by Gender

Variable	Department	Mean	SD
Self-efficacy score	Reproductive Health	99.867	4.414
	Orthopaedics	85.267	4.414
	Child health and paediatrics	90.786	5.405
	Internal medicine	92.800	5.405
	Family medicine	96.400	7.66
	Oncology	-	-
	Radiology	82.00	5.405
	General Surgery	102.80	5.405
	Male	90.48	18.41
	Female	94.39	17.24

Table 5: Aspects of competence: Empathy scores for residents by departments and gender

Variable	Department	Mean	SD
Empathy scores	Reproductive Health	85.46	5.27
	Orthopaedics	84.06	5.27
	Child health and paediatrics	80.78	5.46
	Internal medicine	81.40	6.45
	Family medicine	81.61	9.13
	Oncology	-	-
	Radiology	85.80	6.46
	General Surgery	90.20	6.45

	Male	81.77	20.79
	Female	87.56	18.16

Table 6:Aspects of competence: Physician belief scores by departments and by Gender

Variable	Department	Mean	SD
Physician Belief Score	Reproductive Health	105.87	23.89
	Orthopaedics	131.20	31.82
	Child health and paediatrics	107.50	17.74
	Internal medicine	103.90	24.82
	Family medicine	113.00	11.95
	Oncology	-	-
	Radiology	109.00	19.40
	General Surgery	111.00	17.93
	Male	121.02	32.14
	Female	109.83	21.21

Self-efficacy scores by residents, females scored higher than males however there was no statistically significant differences as t test showed a p value of *0.334 at P <0.05*. Overall score was much higher than the normed score of 69. The perceived self-efficacy in BBN is quite high. Other studies like one by Hudley G. in Uzbekistan in the former Soviet Union (Hudley, 2008) questionnaires which give to oncologists with training in BBN are lower. The qualitative study findings shed light on these findings: the content and methodologies

utilized in training only 33% of the content required to make residents competence was utilized and only 28.5% of the training methodologies were utilized; further 68.75% of the residents have no formal training in BBN and overall only 20% of the residents rated themselves good in BBN suggesting that the high scores in self-efficacy were found to be un likely to be true. Other studies utilizing subjective self-administered questionnaires have been shown be high and the explanation is thought to be natural, residents over rate themselves to look normal; (Alen & der Velden, 2005) this collaborated by a study by (Tongue et al., 2005) 75% of orthodpedic surgeons over rate the selves.

Jefferson Scale for Physician Empathy: The scores shows Empathy scores of residents and gender with the normed value for comparison. Generally, residents scored way below the normed empathy scores of 115. Surgery had the highest empathy scores at 90.20 while paediatrics scored the lowest at 80.786. Female score better than males at 87.56 and 81.77 respectively however this was not statically significant when t tests showed a p value of 0.194 at set P value of 0.005. These findings are similar to the scores of residents in developing countries where humanistic attributes have not been factored in the curriculum and indication of mainly biomedical curriculum model. Empathy is a cognitive virtue of being able to put oneself in the shoes of the patient and from that perspective perfume BBN. This is the most crucial and robust quality required for any form of competence in BBN and the low scores can only mean that residents are incompetent in BBN.

Higher scores in a study by (Hojat et al., 2005, in the developed world where biopsychosocial curriculum model has been applied over the years, (Hojat M. M., 2005)

JSPE scores were even better than the normed value JSPE for the present sample were 117.8

Similar findings in Nepal medical profession students and Indian students, the score was 97.28 slightly higher than our study. (Krishna 2017). (Lucian B et al., 2019) in S America found similar findings lower than those in the developed world

Physician belief scores: Show the physician belief scores by departments and gender and a normed value of 72 for comparison. Department of orthopaedics residents scored the highest at 131.2 while department of internal medicine scored the lowest of 103.9. Females scored lower that males 109.83 and 121.02 respectively. T test done to compare females and males was statistically significant at M>F p value 0.005. The higher the socres the less the confidence in psychosocial aspects in patients the residents have. These findings show that all our residents do not belief that patients psychosocial issue relating to BBN are important; in other words if a patient cries when give bad news, ‘it is none of my business, I will only deal with the organic disease the patient has’. Similar findings by Jurkovich et al., McLennan and associates (1999) and Jenkins and Fallowfield (2002). The low empathy scores and poor performance in PBS are indicators of biomedical curriculum model, this was confirmed by a study by (Giuliani, 2020) found of 7792 identified curricular items in 17 curricula, 780 (10%) aligned with the humanism framework which are attributes of Respect, Compassion, and Empathy which represents a largely Western perspective concerning what constitutes humanism in health care

4.4 Objective number 2.

'To determine the relationship between residents' perception of their competence and their sociodemographic characteristics' To archive this objective residents were group according to their sociodemographic characteristic; gender, level of training, additional training and departments. These were then grouped and compared and inferential statistical analysis done to find out if the differences are significant.

Table 7: Additional training of residents and aspects of competence: self-efficacy

variable	Self-efficacy scale (SES)					Jeffersons Scale for Physician Empathy (JSPE)					Physician Belief scale (PBS)				
	N	Mean	STD	T-test	P-value	N	Mean	STD	T-test	P-value	N	Mean	STD	T-test	P-value
Male	44	90.48	18.4	0.97	0.876	44	81.77	20.7	1.310	0.897	44	121.0	32.1	1.792	0.736
Female	36	94.39	17.2			36	87.56	18.1			36	109.8	21.2		
Part 1	37	83.24	4.87	4.63	0.003	37	80.48	5.56	4.26	0.021	37	118.2	31.1	1.931	0.010
Part 2	43	96.48	16.4			43	85.66	5.20			43	107.7	20.2		
AT	10	95.39	16.5	0.33	0.004	10	86.21	16.7	0.999	0.018	10	99.7	12.2	2.000	0.047
No AT	70	82.38	14.7			70	75.53	11.4			70	111.4	22.5		

Table 7. above shows a summary of sociodemographic features of the residents, gender, level of training and additional training.

Mean and Standard Deviations of Paired Samples T-Tests on self-efficacy Scores shows the effect of additional training on competence on residents with additional training compared with those without additional training additional training was significantly different from those without training, a t-test for independent means was conducted. The results of the analysis indicated that there was statistically significant difference between

the mean scores self-efficacy t (78) =0.334. p value of 0.004. Additionally empathy scores of residents with additional training on competence, p=0.003, empathy t(78)=0.194 p=0.021 and physicians belief score t(78) =0.100, p=0.010. Consequently, it was concluded that additional training of residents is associated with higher scores of aspect of competence, empathy, in BBN tasks.

Level of training part 1 compared with part 2 showed; self-efficacy t(73) =0.427 p=0.003, empathy t(73)=0.331 p=0.021 and physician belief score t(73)=0.213 p=0.010, confirming that level of training significantly influences perceived competence among residents at MTRH in breaking bad news tasks

On the other hand gender of residents on all aspects of competence self-efficacy, JSPE and physician belief scores show that there was no statistically significant difference on gender and all aspect of competence. The result of the analysis indicated that there was non-significant difference, self-efficacy t (78) =0.0.152 p=0.876, empathy t(78)=0.15 p=0.897 and physician belief score t(78)=0.121 p=0736.

These findings are similar to other studies where level of training and additional training significantly influences competence. Gender has been inconsistently been shown to influence competence. A stud by (Luciana B et al., 2019) randomised control training medical students and residents study found that the improvement was mainly related to CS with regard to giving bad news and responding with empathy. Jenkins et al. showed significant improvement attitudes and beliefs toward psychosocial issues compared with controls (P =.002) (Jenkins, 2002. Gorniewicz et al., 2017), who studied the effect of an

intervention using a BBN training module that incorporated patients' story preferences showed similar findings with significant influence specifically related to BBN.

4.5 Objective number 3.

The objective was stated 'To determine the adequacy of the medical training curriculum content and methodologies utilized in training doctors in breaking bad news tasks'

To archive this objective, residents views of curriculum content and methodologies, were sought, MBCHB curricular of Moi University and Kenya Medical practitioners and dentists council core curriculum were analyst, lecturers teaching communication skills in Moi University were interviewed. The findings are presented in the tables below followed by interpretations of these findings.

Table 8: Resident doctors responses questions relating to aspects of curriculum

Items	**Specific areas**	**Responses % yes**
Curriculum content	Curriculum structures Competency levels Helical approach	12.5%
Theoretical basis of communication skills training	Patient centered approach patient safety and satisfaction Tasks and skills Communication skills knowledge Essential steps in BBN	42.5

Specific challenging issues	Breaking bad news in different contexts supportively sensitively and in compassionate manner	36.3
Reflective practice	Recognizing and managing own reaction to bad news self-reflection and self-awareness	0

Table 9: Breaking bad news related courses offered at Moi University, School of Medicine

Items	Units	Timing	Content/methodologies
Communication skills 1 and 2	6	1st year	Study skills Writing skills Speaking skills
Human relationship	3	2nd year	Theories and principles of human communication Communication theories Communication techniques Communication barriers and cultural appropriateness
Methodologies			Lectures, tutorials, and self-directed learning, no practical

Assessments			MCQs, SAQS and LEQs

Table 10: Thematic analysis of content and methodologies utilized in training doctors in breaking bad news tasks

Themes on content and methodologies		Covered/utilized
Curriculum structure	Helical approach with Competency levels	No
Theoretical basis of BBN communication skills	Patient-centered approach	yes
	Patient safety/satisfaction	Yes
	Tasks and skills	No
	Communication skills knowledge	Yes
	Essential steps in BBN	No
Challenging issues	Communication in different contexts	No
	Handling emotions	No
Reflective practice	Recognizing and managing own reaction to BBN	No
	Self-reflection and self-awareness	No
	Over content utilized 3 out of 9	33.3%
Methodologies	Interactive practice sessions	No
	Role plays	No
	Experimental/ active methods	No
	Group work	Yes

	Audio/Video presentations and review	No
	Personal development journal/diaries	No
Other methods	Skills lab	Yes
	Over all recommended methodologies utilized 2 out of 7	28.5%

4.5.4. In depth interviews and focus group discussions

The excerpt below are some of what was captured. Interestingly all the lecturers thought that the content areas were sufficient in preparing doctors in breaking bad news. The trainer from MTRH '*yes, it is adequate in my opinion. It is only that other factors play a role which make our teaching to be insufficient'*. Another said that '*when you are teaching more than two hundred students, it is impossible to adequately utilize whatever the curriculum has provided, so it is insufficient due to the insufficient lecturers'* Conclusively all the three lecturers were in agreement as far as the sufficiency of the curriculum content was concern. When the lecturers were asked tell me more about breaking bad news in teaching the undergraduate students. One of the lecturers said "*these are children and they have no idea about breaking bad news in first and second year, so this is just mentioned to be covered more adequately in the clinical years, however we cannot be sure whether this is done or not as we are through with them first and second year"* Another commented that

" *now that you have brought it up, is it a problem in practice? If so we need to see how this can be covered in the training of doctors, but we are the teachers of communication skills have no contribution to make to the various clinical departments like medicine, surgery or paediatrics. This requires the lecturers in these departments be equipped to teach these*

courses in the clinical years. This has never been addressed in any of the forums of curricular review or development. This is a new thing and whether lecturers will accept to teach both the technical and communication skills like breaking bad news"

Further the lecturers were asked to indicate whether the methodologies adequate in preparing the doctors to perfume breaking bad news tasks. The question was which methods do you utilize in teaching doctors? Most of the lecturers gave lectures as the most common method used in breaking bad news communication teaching, role plays and simulate patients are only utilized in skills lab.

The lecturers were then asked 'do you think these methodologies are sufficient in preparing doctors in breaking bad news? The lecturers did not agree unanimously in their responses, two of them thought they were not sufficient while the third thought they were sufficient. Overall, however the lecturers agreed that the current training of communication skills does not adequately prepare doctors to break bad news and all agreed '*we need to reinforce these along the way until they finish their academic training if we want to see competence among doctors in breaking bad news tasks'.*

Residents who were selected, seven in number, for the focus group discussion were guided in the discussion as per focus interview guide (appendix 9b) The responses were grouped into two categories, those in the affirmative and those in disagreement. From the responses it emerged that residents unanimously felt that their training in breaking bad news tasks was not adequate for use in management of patients. The most common phrases used was '*we were not taught how to handle the situation we find ourselves in practice'* One resident

said that '*he didn't think what they learnt in first and second could be applied to the complex skills required in breaking bad news'*

The insufficient training is what make two of the residents in the focus discussion go for additional training specifically in breaking bad. One said 'when *I noticed during my trip abroad that doctors have specific training in breaking bad news, I just enrolled for a short five day training course based on SPIKES protocol and for that date I have had a lot of confidence when breaking bad news to patients*'

4.5.5. Interpretation of analysis of data from objective 3

The findings of analysis of data is first highlighted followed by interpretation. Residents perception of the adequacy of the curriculum to make them competent, only 12.5% were of the affirmative, coincidently 12.5% of the residents had formal training in BBN.

From the table it is evident that of the 9 content areas Moi University have adopted only three content areas with most mainly addressing knowledge acquisition as opposed to practical skills acquisition. As far methodologies utilized Moi University has not adopted the identified methods for the specific purpose of reaching competence in breaking bad news tasks. It emerged that Moi university has clinical lab sessions for medical students, however it seems that technical clinical competencies are the main skills learnt in those labs. These lab skills are supposed to run throughout the medical school learning experience. During this period students are exposed to most of the methods identified however not specifically in breaking bad news tasks. The methods available include simulated patients and role play which are used alongside communication skills to aid in

integration of basic communication skills and clinical skills. It is however important to note that there is no deliberate attempt to address competence in breaking news specifically.

To enrich the answer to research question one concerning content and methodologies utilized oral interviews were conducted with communication skills lecturers. The interview guide stated: Overall do you think the content areas you teach are sufficient in preparing doctors to perfume breaking bad news communication in patient management? The answer provided by these lecturers were categorized in the affirmative or negative.

The findings on the curriculum showed that the curricular reviewed has been structured in a linear fashion with most of the content covered in the first and second of the medical training. The Medical practitioners and dentist core curriculum has mentioned that some will be covered in detail in clinical years, however there is no indication how this will be implemented and assessed.

Overall BBN has not been given both adequate content and methodologies to adequately make residents competent in this important task

4.6 Constraining factors in performance of breaking bad news tasks.

Objective four is stated as follows: To identify perceived constraints encountered by doctors at MU/MTRH while performing breaking bad news tasks; To archive this objective participants were asked several questions pertaining to constraining factors while performing breaking bad news tasks and focus group discussion with the residents done.

Table 11: Questions and the responses related to constraints

In an average month, how often do you have to break bad news to a patient (e.g., diagnosis, recurrence, progressive disease, etc.)? Workload

Frequency	Number	percentage
10 to 20 times	57	71.3
5 to 10 times	18	22.5
More than 20	5	6.2

Which is the most difficult task relating to BBN?

Discussing end-of-life issues (e.g., do not resuscitate)	35	43.8
Talking about end of active treatment and beginning palliative treatment	18	22.5
Involving family/friends of patient	17	21.3
Discussing diagnosis	8	10.0
Telling patient about recurrence	2	2.4

Have you had any specific teaching or training for breaking bad news? How do you feel about your own ability to break bad news?

Training and ability (SES in BBN)	Number	Percentage
No formal training nor observed a physician break bad news	55	68.75
Sat in with clinicians in breaking bad news interviews	15	18.75
Formal teaching/training	10	12.5
Total	80	100
Fair ability to break bad news	44	55
Poor ability to break bad news	21	25.2
Good ability to break bad news	10	12.5
Very good ability in breaking bad news	5	7.3
Total	80	100

Have you had any specific teaching or training in dealing with emotions? How do you rate your own comfort in dealing patients emotions?

Training and ability (SES in BBN)	Number	Percentage
No formal training nor observed a physician break bad news	55	68.75
Sat in with clinicians in breaking bad news interviews	15	18.75
Formal teaching/training	10	12.5
Total	80	100
Fair ability to break bad news	44	55
Poor ability to break bad news	21	25.2
Good ability to break bad news	10	12.5
Very good ability in breaking bad news	5	7.3
Total	80	100

What do you feel is the most difficult part of breaking bad news?

Task	Number	Percentage
Dealing with the patient's emotion (e.g., crying, anger)	29	36.3
Being honest but not taking away hope	20	25
Involving friends and family of the patient	14	16.4
Involving patient or family in decision-making	12	15
Spending the right amount of time	5	7.3
Total	80	100

Table 11. Show the responses by residents. All the residents break bad news more than 5 times per month (100%). 12.5% of the residents had any formal training in breaking bad news and especially handling emotions associate with Breaking Bad News tasks. Only (17)21.3% of the residents felt comfortable breaking bad news to patients and only (6)7.5% felt they were skilled to break bad news, this corresponds closely to the number of residents who had forma training which agrees with the objective 2 where additional training is associated positively with competence in BBN. However, when asked whether how they felt about their ability (possessing the necessary skills) 70% of the residents with additional training felt that they had the skills. The number of residents reporting the most difficult or most gruelling part of breaking bad news being honest and not taking away hope reduced significantly to only 27.5% in those who had additional training compared with 72.5% of residents with no additional training. This is consistent with the fact that training gives the residents the necessary skills to communicate the bad news and not away hope of the patient.

When were residents asked “Which duty assigned or imposed by employer or circumstance the most difficult relating breaking to bad news?” 60% of the residents with additional training said discussing diagnosis and disease recurrence with the patients while only 15% of those without mention this as the most difficult task. This suggests that training on skills may not affect the affective domain of residents. 67.5% of the untrained residents thought the most difficult task was discussing end of active treatment and moving to palliative care and discussing end of live issues while only 22.5% of residents with additional training think so. This suggest that other factors which were addressed in training play a role including fear of being blamed, fear of one’s death and loss of doctors usefulness. Residents were asked whether they have formal training or sat with a lecturer while they delivered bad news and 57.5% said they had neither been trained nor seen a lecturer breaking bad news!

This was confirmed in the focus group interviews where residents in this study cited fear of being blamed as one of the main hindrances to breaking bad news. One resident said ‘*I once received a very negative reaction from the next of kin whose patient was diagnosed with stage 4 colon cancer, the caretaker was hysterical called me names and said I was responsible for his patients illness and that I will be responsible if anything happened to their patient*’

Insufficiency of training was one of the other important hindrances ‘*This is a situation that actually puts us as medics in a very difficult spot, hence us requesting some dialogue on this issue. BBN is very complex I’m sure to the knowledge of whoever will receive this*

information. We love our work and would wish our patients all the recovery they can get from us, but the BBN issue is an entity that cannot be ignored'

Personal factors of fear of death was evident in that some of the residents that the same anguish the patient id facing also affects them. One of them said '*It is imperative to realize the psychological torment on the patient, or the next of kin, if fear of demise is imminent. This same psychological torment is what we go through as medics, but as we specify, our job is our dedication, as suggested, training will be of paramount importance*'

Workplace factors were also raised as some of the constraints in breaking bad news tasks. Workplace factors were categorized into 4, burden and of work, workplace attitudes and workplace policies. To begin with the residents cited the burden of breaking bad news tasks a major hindrance to effectively perfume breaking bad news tasks. On average residents break bad news more than 5 cases in a month even in part 1 when one is new in MTRH. One commented that workplace managers in MTRH should allocate breaking bad news task to a senior colleague however as it stands any patient one sees in the clinic or ward is the one to break bad news to the same patient.

Workplace attitudes, one said '*Lack of support from the facility we work in on matters of BBN is really affecting our psychological strength even when dealing with other patients. It's really easy to lose focus if you have psychological baggage for as we as doctors also have to put ourselves in the shoes of the people we break bad news to*'

Workplace policies were cited as an important hindrance where one said '*Lack of supervisory support from our superiors puts us in a tight spot as all the responsibility of*

delivering BBN lands squarely in our hands. We must handle that considering the dedication we implied on ourselves when we undertook the decision to become healthcare workers. Such challenges we are humbly requesting not to be ignored' The issue of breaking bad news is not even part of the duty of a resident hence residents focused on must be done tasks on all the patients they have seen which included taking clinical history thorough medical examination, making differentials, and requesting for the appropriate tests to be done and presenting the same to their seniors. If this is successfully done, no one is interested in whether the patient was broken bad news and by whom. 'The supervisors want you to present the patient and your clinical reasoning, but no one asks you how did you inform her of the cancer of the breast' Clearly the hospital routines were set in such a inflexible way that breaking bad news tasks seem like an intrusion. This fact could also explain the ease with which the residents send the patient to the pathologists to give the diagnosis.

4.7 Review of results

Total scores for dependent variables data were into Statistical Package for Social Science (SPSS) software package for Windows version 22. A frequency analysis was conducted in order to assess the assumptions of normally distributed data. Results of this analysis revealed that the data was fairly normally distributed. There were only three respondents that were way too high in their scores in JSPE scores and PBS scores. However, due to robustness of the t-tests and MANOVA, (Drew, 1985) concluded that even a moderate violation of the normality of group variance is mediated. Therefore, the statistical procedures for exploring research questions in this study were parametric tests (ANOVA,

t-tests) based on the normal distribution. Qualitative data conclusively showed that content and methodologies utilized in teaching breaking bad news are not adequate. Residents have significant personal and workplace constraints.

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The findings of the study have been interpreted and comparisons made with findings of other related studies. This has been followed by conclusions based on the findings of this study and finally the researcher has made recommendations for various stakeholders in the medical professions.

Perceived competence in BBN as measured by SES. Range from 82-102.8 normed value 69, these findings are much higher than similar studies; Empathy scores were much lower than other studies scores (90.2 highest lowest 80.78) empathy all below the normed value 115, these are much lower than the normed value; physicians' belief score physicians' beliefs scores range from 103.9 to 131.29 normed value is 72, these results are much higher than the normed value.

Sociodemographic characteristics of residents; additional training, level of training significantly all aspects of competence while gender was not significant in BBN

Curriculum content and methodologies utilized. Timing BBN done in year 2, specific content to provide steps and handling difficult situation not done, curriculum structure linear with most content covered in year 1 and 2.; methodologies utilized overview lectures and group discussions used in training in BBN no active methods utilized. Residents reported several constraints mainly workplace and personal.

Constraining factors identified; personal factors of discomfort in BBN, responding to emotions without taking away hope. This study sought answers to the following questions, assessment of breaking bad news tasks, specifically is content and methodology in making doctors competent in breaking bad news? what the perceived competence of residents is and what are the perceived constraining factors in breaking bad news tasks.

5.2 Discussion objective one

The first objective was stated as follows: To determine residents perceived competence in performing Breaking Bad News tasks. The results of this objective varied on three aspects of competence where: self-efficacy 134% of the normed value, empathy 74% of normed value, physicians' beliefs scores 160% of the normed value, (N=80). Self-efficacy as stated in the literature review is the belief in self that one can the task at hand. This score showed that residents perceived themselves to be able to perform breaking bad news tasks. These findings are much higher than similar studies. Hundley, G. (Hudley, 2008) found lower scores for oncologists in Uzbekistan, former Soviet Union republic. Other studies like those of Tongue et al. (Tongue, 2005) shows that doctor overestimate their ability where they found reported that 75% of the orthopaedic surgeons surveyed believed that they communicated satisfactorily with their patients, but only 21% of the patients reported satisfactory communication with their doctors. Patients' surveys have consistently showed that they want better communication with their doctors (Duffy, 2004), so despite the high score this is likely to be overestimation. This differed from the findings in focus groups interviews where residents did not feel sufficiently prepared in breaking bad news. This

begs the question of why the residents register such a high score in self-efficacy, in the face of insufficient training and enormity of constraints they face.

Several reasons could account for this high score in self-efficacy in breaking bad news tasks.

For one the self-efficacy questionnaire is self-administered where the participant rated their abilities to perform the BBN tasks. Therefor the respondents could have rated themselves higher that they really are. (Alen & der Velden, 2005) suggest that respondents intentionally alter their responses when taking self-assessment in order to appear 'normal'. They note that even with reassurances of confidentiality and with specific instructions about the purposes of the tool, some may still feel and emotional pressure to answer a certain way.

Secondly the residents could have scored high because doctors are considered to be helping people hence in the helping profession and therefore good at doing their duties. Though medical practice is not placed as a helping profession, doctors feel that they should know in order to instruct.

Thirdly it is important to note that the interviews, the research assistant took time to elaborate on the conditions that are considered life threatening diseases giving examples and many of the residents remembered their experiences which some were not good. Hence the residents who participated in the focus groups discussions had a better picture of the breaking bad news tasks than those that just filled the questionnaire. This supported by the qualitative study where residents where only 20% said they were either good or very good.

This finding needs to be collaborated with either direct observation of patient satisfaction surveys.

Empathy scores were much lower than other studies with only 74% of normed value (90.2 highest lowest 80.78) all below the normed value 115, F>M p value 0.194 . In a study by (Hojat M. M., 2005) JSPE scores were even better than the normed value JSPE for the present sample were 117.8 and 10.9, respectively. This represents the western countries and similar to empathy score for the Nepali students which was lower than from developed countries but almost similar to medical students from other Asian medical students and similarly like in this study female Nepali medical students scored slightly higher than their male counterparts. The benefits of this attribute has been documented in literature, humanistic aspect of medicine (Mathews, 1986) (Suchman, 2003) enhance patients satisfaction (Beckman, 1984), increase compliance to treatment (Spiro H. M., 1996) lead to more accurate diagnosis and better patient outcomes (Beckman, 1984) (Roter, 1987)Beckman 1994, greater competence in history taking and resource utilization (Nightingale, 1991). From the focus group interviews and in-depth interviews with the lecturers in school of medicine, this finding is accurate. Consequently, it is plausible to conclude that empathy in medical students in Sub Saharan Africa is lower than in the western countries and further, they may actually be less empathic towards patient care.

These findings however should be interpreted carefully though due to the fact that the instrument was developed and normed in the USA which is different from the African population and culture. There is evidence to show that culture defines individual self and interpersonal relationships, therefore empathy should vary as a function of cultural

background. In Eastern and African cultural contexts, the self is typically experienced as an interdependent and interpersonally connected entity primarily defined by one's place in social relationships and others surrounding the self (Kitayama, 2007). The residents with additional training on empathy scale in this study showed statistically significant difference with those without training. Studies show that empathy declines as students' progress in their academic programs. This finding is similar to other studies including that (Luciana B, 2019) of Lucian B et al, where FL was used to train medical students and residents.

Physicians' belief score was way above the normed value at 168% for males and 152.5% for females. The instrument measures psychosocial orientation of the healthcare provider based on physician's role, what patients want and physicians reaction to patients as people. It is 32 item scale with lowest score of 32 and highest score of 160, the higher the score the less the psychosocial (humanistic) approach to patient care. In this study internal medicine and paediatrics had the best psychosocial orientation while orthopaedics had the worst psychosocial orientation among the residents. Studies by (Ashworth et al., 1984) found for their norming sample (N = 180), that psychiatry and internal medicine had higher psychosocial orientation the United States, similar to what we found except that our population did not have psychiatry residents. Orthopaedic surgery had the lowest psychosocial orientation towards patient psychosocial factors, similar to other studies where specialties were compared, this includes that done by Hojat et al. where orthopaedics had the lowest empathy scores and by extension psychosocial orientation (Hojat M. G., 2002) (Markham, 1997). The residents were scored low on empathy and physicians' belief about psychosocial issues affecting patient in delivering bad news. The skill items with the lowest ratings were primarily related to empathic concern to patient's perspective and

judgmental attitude towards patients' psychosocial issues. This may be an indication of lower humanistic qualities of residents in this study however as alluded to above cultural differences in the norming of the instruments cannot allow one to judge residents using a measurement scale that may not be accurate. The other indication of these finding is non "patient-centred" approach where individual autonomy is not promoted by the culture, the community is considered the essential source of meaning and the main frame of action for the individual(Asante, 2009). Using Heron's six category framework, the residents felt more confident in using prescriptive and informative as opposed to enabling release of emotions (cathartic) and challenging restrictive behaviours (confronting). The residents scored high in areas where emphasis was made during the training probably because they were attached to some form of clinical skills, like taking patient history and clerkship, however they may not have been exposed to a patient who is distressed after a diagnosis of cancer of the stomach (cathartic)Heaven and Maguire (2003) argue that for training in breaking bad news communication skills for health professional there needs to be several elements namely: clear evidence model of communication, demonstration of that model, opportunity for students to practice in a safe environment, explicit constructive feedback on their performance (Heaven, 2006). (Giuliani, 2020)

The African system of thought is rich with supernatural forces that are linked to supernatural things in the natural realm (Brown L. M., 2004). Some believes are so strong and related to speaking that speaking bad things will cause it to come on the individual(Blier, 1996). This belief has led some societies to view speaking about death as a taboo. It is therefore imperative that we have a tool that will capture these unique cultural believes to measure this quality in future. This finding agrees with those of Sharma and

colleges in Aga Khan in desiring a tool specific to the African context(Karishma, 2019).A study (Lonzozou, 2016) done in Togo found that 75% of the African population considered that the most appropriate strategy relating to breaking bad news was not to inform the patient directly but inform the family first. These figures were supported by (Blank, 2011)which suggested that “three quarters of the world’s population is not linked to concepts such as individual autonomy and truth-telling that are assumed by the conventional western bioethics community as critical in medicine (Blank, 2011) what this means is that 1. We need instruments particularly for measuring empathy and physician belief validated in African setup. 2. Studies to develop constructs based on the fact that community is considered the essential source of meaning and individual autonomy is not promoted by the culture.

5.3 Discussion objective 2.

The influence of sociodemographic characteristics on perceived competence. The scores for all the data collecting instruments were significantly higher in residents with additional training as compared with those that did not suggesting that training intervention is associated with improvement of perceived competence. During literature review a number of studies using subjective outcomes like ours showed some improvement in breaking bad news tasks. A 5-day workshop of 50 primary care physicians showed an absence of any training effect on participants (Levinson, 1997). A 10-hour communication skills program for 69 primary care physicians, surgeons, and nurse practitioners conducted in Portland, Oregon showed statistically significant improvements in clinicians’ self-efficacy skills, but did not show improvements in patient’s satisfaction with physician’s performance ratings

(Brown J. B., 1999) Another three-day communication skills training workshop for 61 UK clinical nurse specialists showed significant positive changes in nurses' communication skills competence (Heaven, 2006).

Objective measures using Audio or videotaping of the role-play performances of participants for assessment purposes could have been a good way to judge performance, however this was not possible due to the high cost of resources and logistics required. As (Hulsman et al., 1999) suggested, behavioural observations via audio or video taping with real or standardized patients would add many advantages to the study. Patient satisfaction is needed to correlate with the improvement in self-efficacy as studies like Ley P. (Ley, 1982) showing that doctors think they may have broken the news, the message may not have been received or, at least, retained by the patient, or the truth may be masked by euphemisms or language too technical for the patient to understand. Males generally had higher self-efficacy scores compared with females. This is consistent with other studies that have shown that males have higher self-efficacy (Lars, 2016).

There was a significant difference between residents in part 1 and those that were in part 2, this relates to the level of training in the academic progression. Postgraduate medical training is usually 4 years consisting mainly of the part 1 year one and two where basics of the speciality is taught and part 2 where the residents now specialize in their respective specialities. This supports the helical approach to communication skills training. Residents experience different opportunities to break bad news and learning takes place. Similar findings were concluded by (Kurtz et al., 2005) where they concluded that 'If ongoing, helical communication programmes do not run throughout the course, students will fail to master communication'.

5.4 Discussion objective 3.

Adequacy of content and methodologies used in training residents in BBN. The third objective was to examine the course content and methodologies utilized in training doctors to break bad news against international consensus statement on content and methodologies. The main findings in this study as indicated above is that the content and methodologies utilized in training of doctors are not adequate. This similar to other studies where curriculum content has been found to be the main issue in competence. Maguire and co-workers concluded that specific content would lead to an advantage over those without. Aspergen in one study found that the skills are easily forgotten if not maintained by practice, supporting the spiral structure of the curriculum. (Aspergen, 1999) (Laura, 2019)

It is important to note that communication and breaking bad news are inseparable, therefore, communication skills form a major part of breaking bad news training program. For students to understand how to be patient centered in order to help patients in breaking bad news they must understand human behaviour (White, 2007). The curriculum allocates a total of nine units in the training of communication skills in year one and two and the amount of time allocated to these course seem justifiable as many studies have shown that these skills can be short lived and still be effective in improving leaners personal and professional development, (Martino, 2007)(Heitanen, 2007)(Holden, 1989)(King, 2002). The timing of these courses however is the issue, whereas giving them in the early years of training gives doctors foundations needed to understand human behaviour, it may be too early in the program for the learners to make meaningful application of the knowledge gained especially in the intermediate and complex communication skills where breaking bad news lies.

Other studies have documented that training in clinical clerkships is more effective than in a pre-clinical courses; two high-quality studies from Maastricht (Kraan, 1990) (Bogels, 1996). Studies show that early in the program leaners have not yet been exposed sufficiently to clinical experiences for them to be able to effectively transfer their learning (McCarthy, et al. 2008.) In this paper McCarthy et al. was looking at the communication skills for nurses they suggested that a communication skills module should be included in all final years of undergraduate nursing programmes, this applies to medical students also. With an array of clinical experiences to draw from, final year nursing students are better placed to apply the skills of effective communication in practice. It would therefore be useful to include these courses in the later years, especially in the clinical years. This has been addressed internationally by having a helical as opposed to linear structure of the curriculum and breaking down the communication skills competencies into levels where each level is taught during the curriculum when the students can comprehend what is being taught. The Canadian consensus statement (Donald, 1992), British General Medical Council has developed a helical approach to curriculum structure for undergraduate medical education (Martin, 2008).

Further analysis of the content in these courses are offered as common courses, this has an issue of concern in that they may not specifically address the breaking bad news competence required by doctors on a day-to-day basis. The students therefore moved to the clinical years without having been able to comprehend the connection between breaking bad news communication skills and clinical practice, this leads to theory-practice gap which has been extensively discussed in literature as source of significant deficiency in training of doctors(Chant, 2002)(Aspergen, 1999) Aspergen recommend for medical

students to utilize the knowledge in communication skills, they should be given during clinical years and reinforced in practice. (Shulei, 2012) Shulei, looking at the status quo in humanistic education recommend horizontal “relevance” where the process of teaching, humanistic courses should be mutually penetrated with natural science and medical courses, overlapped with each other and Longitudinal “sequence” where humanistic courses should be set up at the preclinical stage, but are not finished at the preclinical stage and are extended to the entire process of teaching.

Curriculum documents further reveals that a wide range of methodologies were recommended for adoption by trainers in the course of content delivery. On paper this methodology included lectures, role plays, overviews, video and audio presentation, group work and simulated patients. Many of these methods are not available except lectures, overviews and tutorials which are the main method of content delivery. This means without stimulus variation learning is mainly teacher centred which has been shown to be poor in skills development and self-awareness, therefore is mainly for knowledge acquisition. Aspergen in the guideline suggests that training should use experiential methods and primarily address problem-based training skills. (McCarthy, 2008)support the use of experimental in counselling skills training. Experimental method includes group work, role play, personal development diary, flipped classroom approach and feedback.

A third issue on the content revealed that there is need to have specific content in breaking bad news training. In this study those with additional training in breaking bad news were significantly better in all aspects of competence in breaking bad news. These contents have been documented in other studies which address patients’ knowledge, perspectives,

concerns, feelings and demands, as well as acknowledging and responding to their emotions with empathy and compassion which will help patients cope better with bad news(Fallowfield L. &., 2004) (Barnett et al., 2007) The specific content goes with a recommended task process for each of the tasks, as Enna et al. (Eggly, 1997) (ENNA, 2009) has recommended.

5.5 Discussions objective 4.

Constraining factors encountered by residents while performing BBN tasks. Residents reported constraining factors affecting them in performing Breaking Bad News tasks, among them were skills related, workplace related and personal factors. Residents in this study are confronted with this difficult communication early in their careers as seen in the findings where 100% of the residents break bad news to patients more than 5 times in a month. Schildmann et al. found similar findings while studying preregistration house officers (Schildmann, 2005). In the same study 90.4%preregistration house officers felt that they are constrained in doing these tasks, in the current study 85% of the residents felt constrained in breaking bad news to patients. The perception of constraints did not change significantly in those with additional training as compared with those without additional training, this has been documented in other studies which show that training may make people feel more confident that they can successfully deliver news ((Schildmann, 2005) and may make them more effective in doing so (Back A. L.-E., 2003); (Colletti, 2001), training may not actually reduce the stress of delivering the news. Why this is still a challenge can be looked from sociologic perspective. The attitude towards cancer may be evolving but it still seen as a disease with a “death sentence tag” to it and hence negative connotation and stereotype and stigmatization. This is seen by the words used to describe

those suffering as “after a long battle” or lost the battle with cancer. Doctors can be seen using words like “abnormal cells”, an “atypical growth” etc. to avoid the connotation. So, cancer is associated with suffering, pain and death and hence these cultural and social factors are often not obvious, but they play an important role in building doctors’ reluctance to provide information about oncological diagnosis and bad prognosis, and patients’ fear of receiving such news (Paulina, 2017).

The result of this study shows the delivery bad news from the residents’ which is medical perspective and residents thought that dealing with patients emotions and not taking away hope revealed by the patient and delivering the diagnosis or recurrence, were the most difficult aspects of delivering bad news. Residents felt taking patient’s hope away and a sense of helplessness to be the biggest discomfort. In a classic 1984 article with a meaningful title: Breaking bad news: why is it still so difficult? Robert Buckman analyses the mechanism of forming the doctors’ reluctance to deliver bad news and points to two groups of obstacles that doctors have to face in such situation: doctors’ fears and a sense of responsibility. One of the fears that Buckman mentions is the fear of patient’s emotional response. The author explains that strong emotional reactions, e.g. crying are instinctively received by doctors as a signal that they are doing something wrong, that they are making a mistake. It is not easy to realize that crying is not a sign of disaster, neither for the patient nor the doctor, that such a reaction can bring relief to the patient. The author signals that “protecting” the patient by not informing them of the substance of the illness or by presenting unequivocally optimistic scenarios (e.g. not mentioning the possibility of relapse after radical treatment) leads to the perception of the doctor as the person

responsible for everything that is associated with the disease, including the unfavourable development of events often skipped in conversations.

A patient who is aware of their health condition has an opportunity to influence the situation and thus becomes co-responsible for what is happening to them (Buckman, Breaking Bad news: why is it still difficult?, 1984) Skills related constrains seemed to be the main constraining factors in this study. Residents lacked formal training in breaking bad news tasks (60% of the residents) while 15% had not even observed a faculty member breaking bad new to patients. This feedback alludes to the attitude the students took about the study. Historically, medical education has placed more value on technical proficiency than communication skills. This leaves physicians unprepared for the communication complexity and emotional intensity of breaking bad news. As seen in the current study, training in form a workshop, is not sufficient in difficult communication like breaking bad news.

Increasing emphasis on interpersonal and communication skills at all levels of training is reflected in international guidelines for medical schools, Liaison Committee on Medical Education 1998; Association of American Medical Colleges 1999; General Medical Council 2003; the Association of American Royal College of Physicians and Surgeons of Canada(Frank, 2007) consensus statements (Makoul G. , 2001) (Simpson, 1991) Bayer–Fetzer Conference on Physician Patient Communication in Medical Education in 2001. An international expert consensus group of medical education leaders further defined and expanded the ACGME interpersonal and communication skills competencies and developed a teaching toolbox for communication competencies at all levels of medical

training (Rider, 2006). There is no available guideline in Kenya currently requiring residents to be proficient in communication skills and therefore this has been left to the resident to wade through this difficult must do task. Moss (Moss, 1997)noted that, due to the overwhelming involvement of the postgraduate trainee in delivering service, learning communication skills could be haphazard (Moss, 1997).

Workplace related factors in this study included resident's duty to break bad news as part of the service as noted when all the 80 residents break bad news more than 5 in a month. MTRH being a public hospital cannot turn away any patient similar to statistical targets by private hospital which tends to force doctors to devote less time to communicating bad news to patients (Kurer., 2008)The findings in this study suggest that resident's role in patient care may not be very clearly defined especially in breaking bad news tasks. Time was not reported as a constraint in this study though in other studies involving oncologists, time was found to be a constraint.

Finally, personal issues though they were not specifically elicited may have played a role in the perceived constraining factors. This is seen by the fact that untrained residents found discussing about end of active treatment palliative and end of live issues as the most gruelling. These personal issues include being blamed, feeling responsible for the situation, experiencing guilt for being unable to help, and being reminded of one's own mortality (Baile W. F., 2003) (Buckman, Breaking Bad news: why is it still difficult?, 1984). Breaking bad news is a frequent residents' task and therefore training of communication and interpersonal skills, particularly in the area of emotion management and the use of standard guidelines and techniques should be a routine. This will help to reduce anxiety,

increase self-confidence, which in the longer term, can reduce the risk of burnout syndrome in the medical profession and the increase of job satisfaction.

5.5 Limitations and suggestions for additional research

While interpreting the results of this study, some methodological limitation should be noted. These issues have been listed as follows: research design issues, population sample issues and instrument issues.

5.5.1 Population Sample Issues

A purposeful sample from the residents in one institution was used for this study and therefore the sample may not be representative of the larger population of residents in Sub-Saharan Africa. This limits the generalization of the findings to other medical facilities in Kenya and other Countries in Africa. Replicating this study in other universities in Kenya and Africa and involving other health workers would help in verifying and generalization of the findings. The sample size was small 40 in each group which does not permit generalization of the findings in this study.

Investigation based on a larger group of residents will be needed to draw more precise conclusions about the effectiveness of the offered training. Residents were invited and came voluntarily for the training, this may indicate that residents who were motivated to learn communication skills, there is no evidence therefore that the findings in this study would be achieved by less motivated residents.

5.5.2 Instrumentation Issues

The findings in this study in assessment of the effectiveness of the training relied on self-reported subjective responses. Self-reporting responses lack objectivity and may represent the effective skills by residents in their daily clinical and academic practice. Studies using objective measures using video, audio taping and patient satisfaction and outcome reports and analysing feedback form clinical staff would be desirable for future studies. The instruments were normed in USA and therefore the reliability of the instruments may be questionable. Residents were assessed immediately after the training and no further assessment was done, so there is no evidence to suggest that the knowledge was retained. The overall findings of this study can therefore be of general implications for research and clinical practice. The study findings after Flipped classroom approach for residents is effective in modifying residents' communication skills, attitudes and beliefs. The improvement was mainly in self-efficacy and slightly lower improvement was found in empathy scores and physicians belief scores, which is an indication of possible improvement in participants' caring behaviours toward patients with cancer. There was improvement in psychosocial beliefs scale this indicates that physicians do support the importance of the psychosocial aspects in cancer care.

5.6 Conclusions

The study sought to investigate perceived competence of residents doctors in breaking bad news tasks, in particular the study sought to identify the content and methodologies in training doctors in breaking bad news, perceived competence and constraints, conclusions

will be presented along the objectives of the study, content and methodologies, perceived competence, effectiveness of additional training and constraining factors.

5.6.1 Perceived competence of residents in breaking bad news tasks

Perceived competence varied in the three aspects of competence however overall, this study has conclusively found the resident doctors who were the participants in study are not competent in breaking bad news. Self-efficacy, scores though very high was confirmed not to be true from focus group interviews. Both empathy and physician belief were way below what is required for any doctor to be competent in breaking bad news. Competence has also been shown to be influenced by; additional training, level of training breaking bad news tasks. Gender did not significantly influenced competence in breaking bad news tasks. Future studies should measure their actual performance to confirm these findings.

5.6.2 Content and methodologies used in training in breaking bad news tasks in medical education

This study sought to ascertain whether training of doctors based on Moi University School of Medicine senate approved MBCHB curriculum and other Kenyan Medical Schools using the Kenya Medical Practitioners and Dentists Council Core Curriculum are sufficiently prepared for breaking bad news tasks expected during their practice as consultants in various fields.

Overall, this study has conclusively found that it is not adequate. The inadequate areas are highlighted as follows: First and foremost the curriculum is linear; hence though doctors are exposed to relevant courses which are able to prepare them in breaking bad news tasks, this is given in year one and two which makes the course suitable for only basic

communication skills and not in breaking bad news tasks, which is considered complex, and should be taught in the clinical years with other clinical competencies when students can meaningfully apply the knowledge gained. Secondly, these courses are offered as common courses to all students in health training in the college of health sciences rendering them too general for any specificity to be achieved. The literature, cited, has indicated the need for communication skills including breaking bad news to have competencies given in different levels during the academic progression with basic being taught and examined at the current level, intermediate with the junior clerkship and complex with the senior clerkship. Similarly, the teaching methodologies has been conclusive found to be inadequate in preparing doctors to carry out breaking bad news tasks. The minimum methodology should give the students an opportunity to practice and be assessed directly or by video recording while performing the task. There exists clearly a theory-practice gap.

5.6.3 Constraining factors in breaking bad news tasks

The findings in this study found that doctors encountered mainly work-related constraints in breaking bad news tasks. Resident doctors did not feel sufficiently trained in braking bad news tasks expected of them, as a result some of them enrolled for additional training to bridge this gap. Residents doctors were overwhelmed by the work load in breaking bad news tasks as many of them broke bad news more than 5 per month, this not only have a lot of personal emotional drain but required structural support aimed at caring for the doctors to avoid burn out. Workplace factors included allocation of duties regardless of seniority in training where part 1 and part 2 residents reported roughly the same amount of workload in breaking bad news. The issue of breaking bad news seems to be a neglected

issue as compared with technical clinical related work, this makes resident doctors focus on the clinical work and pay little attention to the communication skills aspect.

5.7 Recommendations and implications

To medical education curriculum committees: The findings in this study provides valuable insight for medical education curriculum developers in medical doctors training on nature, mode, and relevant areas of emphasis. Foremost there is urgent need to structure the curriculum from linear to helical approach to teaching and assessment of communication skills including breaking bad news tasks. This will allow for teaching of this courses to be in competency levels, being included in clinical year.

To Moi University management; inadequate content and methodologies require support to the faculty in clinical areas to be competent in communication skills so that the current lecturers in basic medical education can continue to serve in their present capacity. The teaching institution, that is Moi University, should put in more resources so that the listed methodologies can be utilized fully. Competencies in Breaking bad news like other clinical skills competencies should be clearly defined as teachable and measurable skills.

Hospitals where medical students train should also put in place mechanisms which allows doctors to have continuous medical education in breaking bad news and other complex communication skills, based on the finding that additional training significantly influences competence.

Facilitators of training doctors in breaking bad news tasks should be seen as crucial in the overall success of the course of breaking bad news hence need for them to be competent

mentors. The traditional way of considering this topic and non or pre-clinical course should be reviewed with an aim of placing it squarely in clinical courses. Most of the facilitators of this courses are professional in their clinical fields and they conduct their professional work in the clinical setting.

Conclusively, this study has several recommendations for further research. The focus of this study was residents perceived competence in breaking bad news, in order to get a complete picture, it is necessary to use objective measures, faculty analysis of residents and video recording with feedback and patients' perspective, the consumers of the skills. The issue about patients' view will go beyond assessing the residents but even determine how much information is required to be passed over to them in cases of bad news. The study could also be replicated with other health workers like palliative care nurses, oncologists, and social workers.

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APPENDICES

APPENDIX 1: INFORMED CONSENT

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Purpose and background: The purpose of this study is to '**critically asses assess doctor's performance in breaking bad news tasks, identify the constraining and assess the effectiveness of training intervention**'. **Procedure:** The study targets all post graduate doctors working in MTRH and were trained either in Moi University or University of Nairobi; purposeful sample of 80 clinicians who meet the criteria are eligible for this study. **Risks**: There are no known risks or discomforts associated with participation with this study. However, you may be inconvenienced by taking the extra time to attend the training and complete questionnaires. **Benefits:** You will receive extensive training in skills that are associated with improved health care for your patients. At the end of the study you will receive a certificate of completion of a one-day workshop. **Cost or Compensation:** Participation in this research project will not cost you any money. You will not be compensated for your time. The training will occur during the weekend.

Confidentiality: Your participation in this study is confidential. Your name or other identifying information will not be attached to any of the information gather in this project. All the information you provide will be identified by code number. All information will be stored in lock cabinets in the research assistant's office. The only document that will

contain your name in this consent form which will be separated from the rest of the materials. The data collected will be used for statistical analyses and no individuals will be identifiable from the pooled data. The information obtained from this research may be used in future research and published. However, your right to privacy will be retained.

All data will be presented in group format and no individuals will be identifiable from the data. Your participation in this research project is entirely voluntary. You do not haveto participate. You do not have to answer any question(s) that you do not wish to answer.

Please be advised that you may choose not to participate in this research study, and may withdraw from the study at any time without consequence. Your department or medical group will not be notified of whether or not you participate.

Consent: I have read the above information/ I have been explained to in detail about the study. I have asked questions and received answers and agree to participate in the study

Signature_____Date_____

APPENDIX 2: BIOGRAPHICAL FORM

Please respond to all the items in this form by putting a tick in the boxes and by filling the spaces provided as appropriate:

1. Which section in MTRH are you currently working?
2. What is your gender? ☐Male ☐ female
3. What is your age?☐under 30 years ☐30-35 ☐35-40 ☐40-49 ☐over 50 years
4. For how long have worked as doctor? ☐under 5years ☐5-10 years ☐over 10 years
5. For how long have worked as a specialist doctor? ☐under 5 years ☐5-10 years ☐over 10 years
6. What is your highest level of training? ☐MBCHB ☐MMED ☐PHD ☐☐others specify_____
7. Have you had additional training in communication skills specifically in breaking bad news? ☐yes ☐No
8. If yes 7 above what is the name of the course which you undertook the additional training BBN skills? _____
9. How long was training in BBN skills ☐less than 3 months ☐3-6 months ☐6-12 months

APPENDIX 3: SELF-EFFICACY QUESTIONAIRE (SEQ)

Below is a list of statements designed to assess your self-efficacy in performing breaking bad news tasks in the course of managing patients. Please note that this is not a measure of your competence, rather it seeks to identify how you view your ability to perform this tasks. Your honest answers will therefore be highly appreciated. Carefully read this statements and on the scale provided, please indicate how you feel about your ability to perform these tasks, by circling the appropriate number 1 to 5, where;

1=Poor; 2=Fair; 3=good; 4= Very good 5=Excellent

1. Greets and shows interest to the patient as a person 1 2 3 4 5
2. Uses words that show care and concern throughout the interview 1 2 3 4 5
3. Uses tone, pace, eye contact and posture that show care and concern 1 2 3 4 5
4. Allows the patient to complete opening statement without interruption 1 2 3 4 5
5. Asks “is there anything else” to elicit full set of concerns 1 2 3 4 5
6. Explains and negotiates an agenda for the visit 1 2 3 4 5
7. Begins with patient narrative using open ended questions (tell me about------) 1 2 3 4 5
8. Clarifies details as necessary with yes/no questions 1 2 3 4 5
9. Summarizes and give patient opportunity to correct or add information 1 2 3 4 5
10. Transitions effectively to additional questions 1 2 3 4 5

11. Asks about life events, circumstances, other people that might affect health	1 2 3 4 5
12. Elicits patients beliefs, concern and expectations about illness and treatments	1 2 3 4 5
13. Asses patients understanding of problem and desire for more information	1 2 3 4 5
14. Explains using words that are easy for patient to understand	1 2 3 4 5
15. Asks if the patient has any questions	1 2 3 4 5
16. Includes patient in choices and decision to the extend he/she desires	1 2 3 4 5
17. Checks for mutual understanding of diagnosis or treatment plans	1 2 3 4 5
18. Asks about patients ability to follow diagnostic or treatment plan	1 2 3 4 5
19. Identifies additional resources as appropriate	1 2 3 4 5
20. Asks if the patient has questions, concerns or other issues	1 2 3 4 5
21. Summarizes	1 2 3 4 5
22. Clarifies follow up or contact arrangements	1 2 3 4 5
23. Acknowledges the patient and closes the interview	1 2 3 4 5

Total maximum scores: 115 normed scores: not available

APPENDIX 4: PHYSICIANS BELIEFS QUESTIONAIRE (PBS)

A reliable measure of doctors psychosocial beliefs. Physician Belief Scale include: a simple means of evaluating the effectiveness of behavioral science teaching, a means of assessing beliefs within and between disciplines and can be a way to measure change in provider beliefs.

1. I cannot treat psychosocial problems	1	2	3	4	5
2. My patients do not want me to investigate psychosocial problems	1	2	3	4	5
3. I cannot help patients with problems I have not experienced myself	1	2	3	4	5
4. I do not focus on psychosocial problems until I have ruled out organic disease	1	2	3	4	5
5. If I address psychosocial issues. patients will reject them and never return	1	2	3	4	5
6. Mind and brain influence physical disease and body perception	1	2	3	4	5
7. Exploring psychological issues with the patient often causes me pain	1	2	3	4	5
8. The biological model of disease is the most appropriate model for health care	1	2	3	4	5
9. I am intruding when I ask psychosocial questions	1	2	3	4	5
10. I must consider organic and psychosocial problems concurrently	1	2	3	4	5
11. It is difficult to deal with psychosocial problems when I have many of the same problems as my patients	1	2	3	4	5

12. Evaluating and treating psychosocial problems will cause me to be more overburdened than I already am	1	2	3	4	5
13. I feel guilty probing the psychological concerns of my patient	1	2	3	4	5
14. I am too pressed for time to routinely investigate psychosocial issues	1	2	3	4	5
15. My patients feel questions about the psychosocial aspects of their lives are irrelevant	1	2	3	4	5
16. The stresses we all experience do not significantly influence the onset or course of disease	1	2	3	4	5
17. One reason I do not consider psychosocial information is the limited time I have available	1	2	3	4	5
18. Patient will become more dependent on me if I open up psychosocial concerns	1	2	3	4	5
19. If I deal with psychosocial issues, I will lose patients	1	2	3	4	5
20. There are so many issues to be investigated when seeing a patient that I do not always consider psychosocial factors	1	2	3	4	5
21. My own psychological problems do not interfere with my ability to treat patients	1	2	3	4	5
22. Consideration of psychosocial problems will require more effort than I have to give	1	2	3	4	5
23. Patients blame me for psychological problems	1	2	3	4	5

24. Talking about psychosocial issues causes more trouble than it is worth	1	2	3	4	5
25. Investigating psychosocial issues decreases my efficiency	1	2	3	4	5
26. Patients will reject the idea of my dealing with psychosocial issues	1	2	3	4	5
27. Investigating psychosocial issues causes me to lose time and money	1	2	3	4	5
28. I can't help a patient with a psychosocial problem that I have not resolved for myself	1	2	3	4	5
29. I can investigate psychosocial issues without decreasing my efficiency	1	2	3	4	5
30. I focus on organic disease because I cannot treat the psychosocial	1	2	3	4	5
31. Depressed patients frequently present with vegetative somatic complaints	1	2	3	4	5
32. Patent's with psychosocial concerns tend to become dependent on me	1	2	3	4	5

NB: Maximum scores is 160. Normed scores is 72.1. The higher the score the worse the psychosocial orientation of the participants

APPENDIX 5: JEFFERSON SCALE OF PHYSICIAN EMPATHY (JSPE)

My understanding of how my patients and their families feel do not influence medical or surgical treatment	**1 2 3 4 5 6 7**
I believe that emotion has no place in the treatment of medical illness.	**1 2 3 4 5 6 7**
My patients value my understanding of their feelings, which is therapeutic in its own right.	**1 2 3 4 5 6 7**
Empathy is a therapeutic skill without which success in treatment is limited.	**1 2 3 4 5 6 7**
I believe that empathy is an important therapeutic factor in medical or surgical treatment	**1 2 3 4 5 6 7**
My patients feel better when I understand their feelings	**1 2 3 4 5 6 7**
Patients' illnesses can be cured only by medical or surgical treatment; therefore, emotional ties to my patients do not have a significant influence on medical or surgical outcomes	**1 2 3 4 5 6 7**
An important component of the relationship with my patients is my understanding of their emotional status, as well as that of their families	**1 2 3 4 5 6 7**
I do not allow myself to be influenced by strong personal bonds between my patients and their family members	**1 2 3 4 5 6 7**
Attentiveness to my patients' personal experiences does not influence treatment outcome	**1 2 3 4 5 6 7**

I try to think like my patients in order to render better care.	**1 2 3 4 5 6 7**
I consider understanding my patients' body language as important as verbal communication in caregiver-patient relationships.	**1 2 3 4 5 6 7**
I try to understand what is going on in my patients' minds by paying attention to their nonverbal cues and body language.	**1 2 3 4 5 6 7**
I try to imagine myself in my patients' shoes when providing care to them.	**1 2 3 4 5 6 7**
I try not to pay attention to my patients' emotions in history taking or in asking about their physical health.	**1 2 3 4 5 6 7**
It is difficult for me to view things from my patients' perspectives.	**1 2 3 4 5 6 7**
I have a good sense of humor, which I think contributes to a better clinical outcome	**1 2 3 4 5 6 7**
Because people are different, it is difficult for me to see things from my patients' perspectives.	**1 2 3 4 5 6 7**
Asking patients about what is happening in their personal lives is not helpful in understanding their physical complaints.	**1 2 3 4 5 6 7**
I do not enjoy reading nonmedical literature and the arts	**1 2 3 4 5 6 7**

NB: Maximum scores is 140. Normed scores is 115

APPENDIX 6. CONSTRAINTS QUESTIONAIRE

1. In an average month, how often do you have to break bad news to a patient (e.g., diagnosis, recurrence, progressive disease, etc.)?
   5 to 10 times
   10 to 20 times
   More than 20
2. Which do you find the most difficult task?
   Discussing diagnosis

   Telling patient about recurrence

   Talking about end of active treatment and beginning palliative treatment

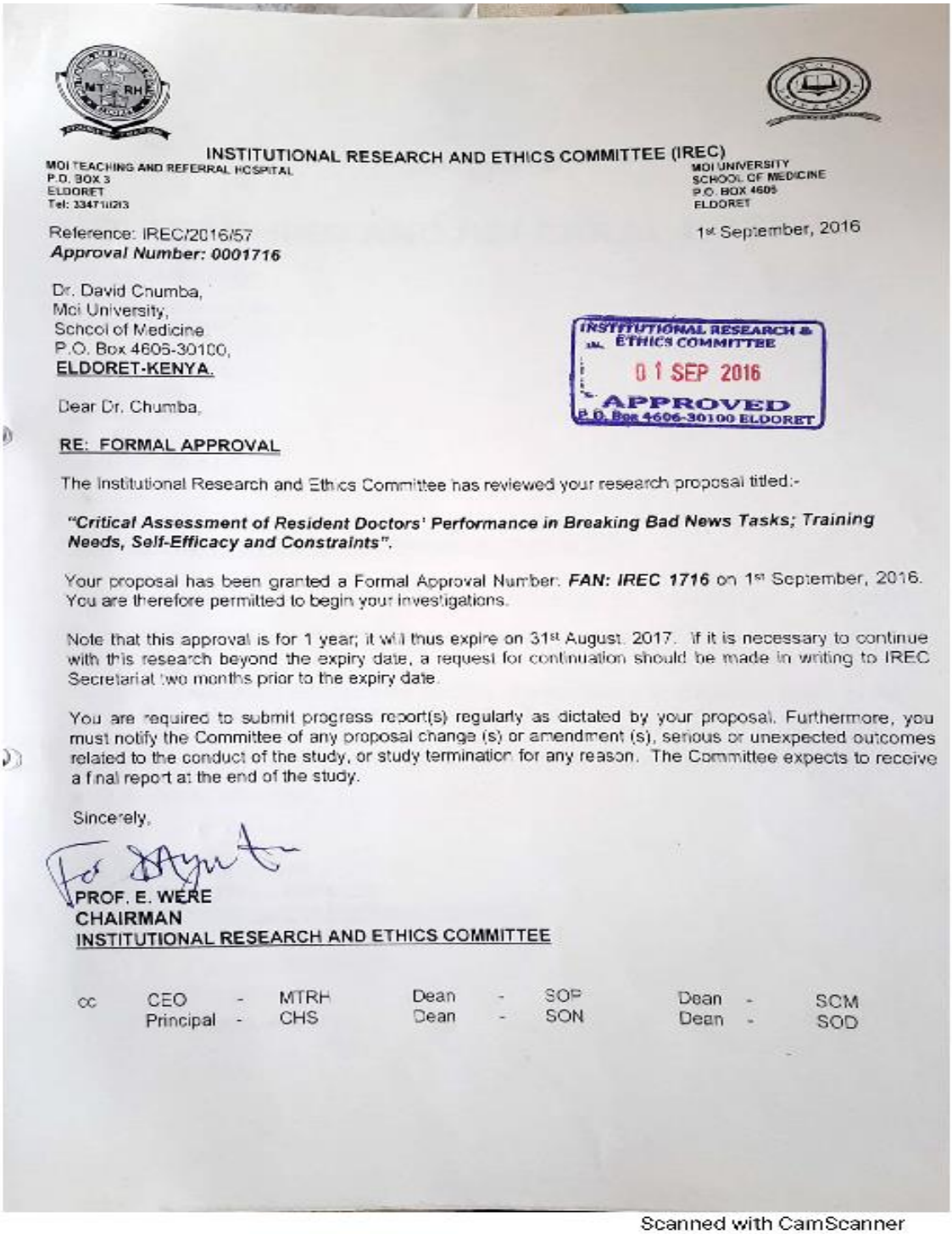
   Discussing end-of-life issues (e.g., do not resuscitate)

   Involving family/friends of patient

3. Have you had any specific teaching or training for breaking bad news?
   a. Formal teaching
   b. Sat in with clinicians in breaking bad news interviews
   c. Both
   d. Neither
4. How do you feel about your own ability to break bad news?
   a. Very Good
   b. Good
   c. Fair
   d. Poor
5. What do you feel is the most difficult part of discussing bad news (challenging situations)?
   a. Being honest but not taking away hope
   b. Dealing with the patient's emotion (e.g., crying, anger)
   c. Spending the right amount of time
   d. Involving friends and family of the patient
   e. Involving patient or family in decision-making
6. Have you had any training in the techniques of responding to patient's emotions?
   a. Formal teaching
   b. Sat in with practicing clinician
   c. Both
   d. Neither
7. How would you rate your own comfort in dealing with patient's emotions (e.g., crying, anger, denial, etc.)?
   a. Quite comfortable
   b. Not very comfortable
   c. Uncomfortable
8. How would you agree with the following statements relating to breaking bad news training
   a. Curriculum structure is helical or spiral with competence levels (yes or no)

b. Theoretical basis of communication skills covered (yes or no)
c. Breaking bad news training using task approach with task process (yes or no)
d. Challenging situations in breaking bad news were addressed (yes or no)
e. Reflective approach in coping with the effects of breaking bad new (yes or no)

APPENDIX 7: IREC FORMAL APPROVAL



INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE (IREC)

MOI TEACHING AND REFERRAL HOSPITAL
P.O. BOX 3
ELDORET
Tel: 33471/213

MOI UNIVERSITY
SCHOOL OF MEDICINE
P.O. BOX 4606
ELDORET

Reference: IREC/2016/57
Approval Number: 0001716

1st September, 2016

Dr. David Chumba,
Moi University,
School of Medicine
P.O. Box 4606-30100,
ELDORET-KENYA.

INSTITUTIONAL RESEARCH & ETHICS COMMITTEE
01 SEP 2016
APPROVED
P.O. Box 4606-30100 ELDORET

Dear Dr. Chumba,

RE: FORMAL APPROVAL

The Institutional Research and Ethics Committee has reviewed your research proposal titled:-

"Critical Assessment of Resident Doctors' Performance in Breaking Bad News Tasks; Training Needs, Self-Efficacy and Constraints".

Your proposal has been granted a Formal Approval Number: ***FAN: IREC 1716*** on 1st September, 2016. You are therefore permitted to begin your investigations.

Note that this approval is for 1 year; it will thus expire on 31st August, 2017. If it is necessary to continue with this research beyond the expiry date, a request for continuation should be made in writing to IREC Secretariat two months prior to the expiry date.

You are required to submit progress report(s) regularly as dictated by your proposal. Furthermore, you must notify the Committee of any proposal change (s) or amendment (s), serious or unexpected outcomes related to the conduct of the study, or study termination for any reason. The Committee expects to receive a final report at the end of the study.

Sincerely,

PROF. E. WERE
CHAIRMAN
INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE

cc CEO - MTRH Dean - SOP Dean - SCM
Principal - CHS Dean - SON Dean - SOD

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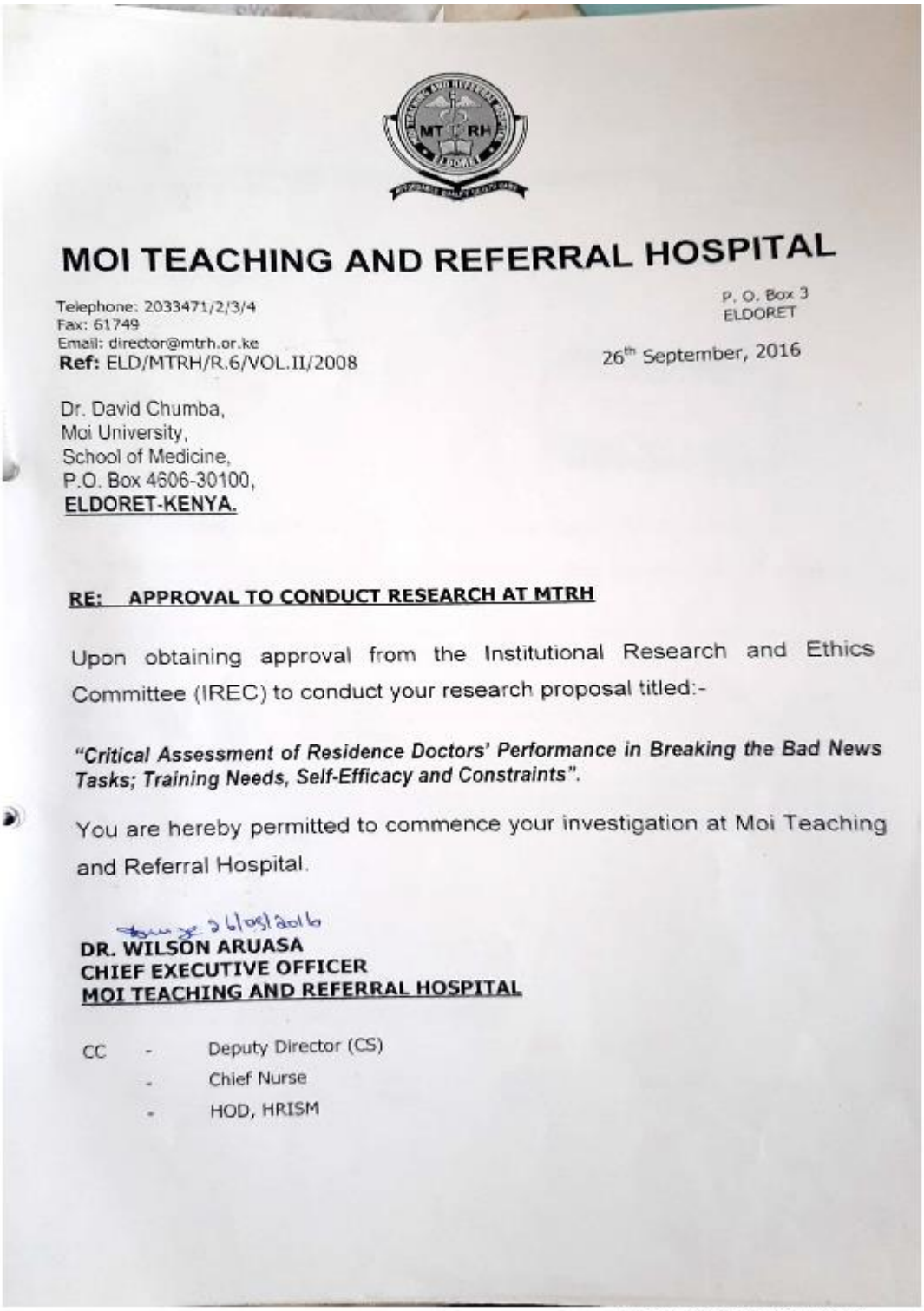
APPENDIX 8: A GUIDE FOR DOCUMENT ANALYSIS

1. Name of the institution:
2. Title of the document:
3. Training level:
4. Length of training:
5. Course relevant of breaking bad news:
6. Content areas in breaking bad news tasks- key area focus
    a. Psychological theories
    b. Breaking bad news practice
    c. Breaking bad news knowledge
    d. Communication skills practice
    e. Communication skills knowledge
    f. Self-reflection
    g. Interpersonal skills knowledge
    h. Self-awareness
    i. Person centered principles
    j. Others
7. Methodologies utilized in training in breaking bad news tasks- key areas
    a. Interactive practice sessions
    b. Role plays
    c. Experimental methods
    d. Group work
    e. Video recording and presentations
    f. Audio presentations
    g. Personal development journals and diaries
    h. Others
8. Specific content for breaking bad news, the (bolts and nuts)
    a. List and discuss the essential steps in delivering bad news.
    b. Convey bad news to the patient in an accurate, supportive, sensitive and compassionate manner.
    c. Have a consistent approach to the delivery of bad news specific guidelines
    d. Recognize and assess the patient's reaction to bad news.
    e. Respond effectively to the upset or distraught patient.
    f. Recognize and manage his or her own reaction to the bad news and to the patient's reaction.
    g. Others

APPENDIX 9: MTRH APPROVAL TO CARRY OUT RESEARCH



MOI TEACHING AND REFERRAL HOSPITAL

Telephone: 2033471/2/3/4
Fax: 61749
Email: director@mtrh.or.ke
Ref: ELD/MTRH/R.6/VOL.II/2008

P. O. Box 3
ELDORET

26th September, 2016

Dr. David Chumba,
Moi University,
School of Medicine,
P.O. Box 4606-30100,
ELDORET-KENYA.

RE: APPROVAL TO CONDUCT RESEARCH AT MTRH

Upon obtaining approval from the Institutional Research and Ethics Committee (IREC) to conduct your research proposal titled:-

"Critical Assessment of Residence Doctors' Performance in Breaking the Bad News Tasks; Training Needs, Self-Efficacy and Constraints".

You are hereby permitted to commence your investigation at Moi Teaching and Referral Hospital.

26/09/2016

DR. WILSON ARUASA
CHIEF EXECUTIVE OFFICER
MOI TEACHING AND REFERRAL HOSPITAL

CC - Deputy Director (CS)
- Chief Nurse
- HOD, HRISM

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APPENDIX 10a: INTERVIEW GUIDE

Open ended questions to the residents relating to breaking bad news training

1. Relating to the undergraduate communication skills training curriculum
    a. Is it divided into Basic communication skills, intermediate communication skills and Complex communication skills
    b. Teaching of communication skills examined in more than once in medical school
2. In your training in breaking bad news were you given the theoretical basis of communication skills especially (do you understand why this course?)
    a. Patient safety
    b. Patient centered approach
3. What was the approach in training of communication skills training including breaking bad news
    a. Communication skills taught as a procedure
    b. Communication skills taught as tasks
4. Were specific challenging situations addressed during your training
    a. Breaking bad news
    b. Handling emotions
    c. Specific contexts
    d. Dealing with uncertainty
5. Communicating beyond the patient (were you taught how to)
    a. Communicate with colleagues
    b. Communicate with Relatives
    c. Communication through and to Media
6. Was there any specific plan to cope with the aftermath of breaking bad news in your future practice, if so what were some of the strategies?
    a. Reflective practice of processing own feelings
    b. Self-awareness
7. Over all do you think the course offered in undergraduate medical training adequate in preparing you to break bad news?

APPENDIC 10b: FOCUS GROUP DISCUSSION

1. Discuss how you were taught communication skills including breaking bad news
    a. Lectures, tutorials and assessment as MCQs, SAQs etc
    b. Role play and feedback from the lecturers
    c. Active learning methods
2. Discuss whether a theoretical basis of communication skills was taught
    a. Reasons for this course
    b. How was communication skills presented
    c. As a procedure
    d. Tasks
    e. General communication skills training none of the above
3. Did you have an understanding or comprehension of some of the communication skills especially breaking bad news
    a. Any opportunity to apply what you have learnt in real patients
    b. Did you receive any feedback during your training
4. Did you have any discussion on communication beyond the patient
5. Did you have any discussion on coping mechanism to the effects of breaking bad news?
6. What are the common constraints you come across when breaking bad news

IN depth interview guide with the lecturers

Relating to the undergraduate communication skills training curriculum

a. Is it divided into Basic communication skills, intermediate communication skills and Complex communication skills
b. Teaching of communication skills examined in more than once in medical school

In training students in breaking bad news do you give the theoretical basis of communication skills especially

c. Patient safety
d. Patient centered approach

What was the approach in training of communication skills training including breaking bad news

e. Communication skills taught as a procedure
f. Communication skills taught as tasks

Were specific challenging situations addressed during your training

g. Breaking bad news
h. Handling emotions
i. Specific contexts
j. Dealing with uncertainty

Communicating beyond the patient (do you teach how to?)

k. Communicate with colleagues
l. Communicate with Relatives
m. Communication through and to Media

Do you teach how to cope with the aftermath of breaking bad news in your future practice, if so what were some of the strategies?

n. Reflective practice of processing own feelings
o. Self-awareness

Over all do you think the course offered in undergraduate medical training adequate in preparing you to break bad news?

APPENDIX 11: SUMMARY OF NARRATIVES FROM PARTICIPANTS

LECTURERS

Gender	Education Level	Years of experience	Prior training in BBN	Institute	Name	
Male	PhD	5-10 Years	Yes	Liverpool school of Tropical Medicine		
Female	Msc	Over 10 years	Yes	Cousera		
Female	Msc	Over 10 years		UoN		

1. Relating to communication skills training in undergraduate medical students, how is the curriculum?
2. Overall do you think students are adequately prepared to break bad news?
3. What methodologies do you use to teach communication skils?

- '*Communication skills training is build in all levels of learning, however the assessment of students is done only during the course of communication skills. Certain aspects of communication skills like breaking bad news is not sufficiently taught as these will require students to have a clear picture of what a live threatening situation is'*
- *Yes, adequate in my opinion but challenges in implementation and assessment. In implementation I mean, the course is taught in problem based leaning model and there is no specific objective in breaking bad news.*
- *The students should build on what we have taught them in theory and narrow it down to specific patient who may have a different disease*

- *Lectures and overviews are the main modes. There are no practicals and assessment is by MCQs and short answer questions, it all theorectical, none of the listed methodologies are used.*
- *I wish I could do more like role plays, but the curriculum is too crowded for me to do anything else*

One lecturer. **Relating to the undergraduate communication skills training curriculum**

a. Is it divided into Basic communication skills, intermediate communication skills and Complex communication skills?

Respondent: *Well I think the level of communication skills at the school remains the same from the first to sixth year of medical school of which I can call it basic, if you actually look at the postgraduate curriculum and compare it with the undergraduate curriculum the level of training is the same according to me.*

b. **Teaching of communication skills examined in more than once in medical school**

I think there is only one unit on communication skills in the MbChb curriculum
In your training in breaking bad news were you given the theoretical basis of communication skills especially (do you understand why this course?)

Respondent: *During our training the theoretical basis was first to break the news to the relatives before confronting the patient. This way it made it easy to talk to the patient when you are in the company of one of the relatives. So I will easily say it was a patient safety approach.*

What was the approach in training of communication skills training including breaking bad news

Respondent: *In my opinion I would say that BBN training was kind of a task but other communication skills were taught as procedures for example greeting patients, asking them how they are fairing on etc his is considered procedural in history taking.*

Were specific challenging situations addressed during your training?

The most challenging situation was handling emotions I mean come on we are human beings and we have emotions. The way we handle emotions is very important, I have seen a doctor break down into tears after breaking bad news to a patient's family member in fact the family member ended up consoling the doctor

Communicating beyond the patient (did you teach how to)

Respondent: *beyond the patient we taught on how to communicate with the relatives which was of vital importance and communicating with the team you are working with that is colleagues in order to avoid confusion and blame games*

Was there any specific plan to cope with the aftermath of breaking bad news in your future practice, if so what were some of the strategies?

Respondent: *There was no strategic plan specifically but it was mentioned more than once that talking to colleagues actually reduces the stress and pressure after breaking bad news*

Over all do you think the course offered in undergraduate medical training adequate in preparing you to break bad news?

Yes for undergraduate and NO for pastgraduate, BBN is still a very hard task to many doctors the current curriculum does not sufficiently train and prepare doctors

for the task of breaking bad news. In my view the curriculum can be reviewed to address this this issues

Another lecturer.

Relating to the undergraduate communication skills training curriculum

a. Is it divided into Basic communication skills, intermediate communication skills and Complex communication skills?

Respondent: *From my experience communication skills in the current curriculum at the school of medicine is basic at the pre-clinical stage then advances to complex during the clinical /the last years of the medical course, particularly when the students are given the responsibility to handle patients directly.*

b. Teaching of communication skills examined in more than once in medical school

Respondent: It is taught once at the undergraduate level

In your training in breaking bad news were you given the theoretical basis of communication skills especially (do you understand why this course?)

Respondent: *BBN was taught basically to protect the interest of the patient but the most important thing was to make sure if you can't break the news to the patients directly then you have the knowledge and expertise to inform the caretakers or the relatives in a way that it won't further affect the patient,*

What was the approach in training of communication skills training including breaking bad news

Respondent: *It was taught as a task during communication skills training because basically at the end someone has to break the news to the family whether good or bad*

Were specific challenging situations addressed during your training?

Respondent: *The most important challenging situation that was addressed was to expect the unexpected when breaking bad news. Because basically nobody wakes up expecting bad news during the day they always come as a surprise. So it is good to be prepared for any outcome when breaking bad news to a patient or their family members*

Communicating beyond the patient (did you teach how to)

Respondent: *basically we were taught how to communicate with relatives, communicating with the media was not part of the training, with regards to communicating with colleagues it came automatically as you have to consult colleagues irrespective in what career you are in*

Was there any specific plan taught to cope with the aftermath of breaking bad news in your future practice, if so what were some of the strategies?

Respondent: *There was none that is why many doctors find it hard to break bad news knowing that you have to deal with the aftermath on your own*

Over all do you think the course offered in undergraduate medical training adequate in preparing them to break bad news?

Respondent: *It is inadequate a curriculum review is eminent to address these issues of BBN otherwise the problem of breaking bad news will persist*

PARTICIPANTS; RESIDENT DOCTORS

1. What constraints do you face as residents breaking bad news to patients
2. Relating to curriculum content is it adequate in preparing you in breaking bad news?
3. Why did you go for additional training in breaking bad news and where did you do it?

Lack of counselling after Breaking Bad News

"*Our facility does not have counselling services for doctors after BBN so after giving the patients or next of kin the bad news you are on your own. You will suffer from the guilt and emotional reactions from the family on your own with no support from the hospital"*

"Lack of support from the facility we work in on matters of BBN is really affecting our psychological strength even when dealing with other patients. Its really easy to loose focus if you have psychological baggage for as we as doctors also have to put ourselves in the shoes of the people we break bad news to"

"Lack of supervisory support from our superiors puts us in a tight spot as all the responsibility of delivering BBN lands squarely in our hands. We have to handle that considering the dedication we implied on ourselves when we undertook the decision to become healthcare workers. Such challenges we are humbly requesting not to be ignored."
"Similar to other studies, our residents reported lack of space to actually conduct the BBN issue as it clearly carries so much time, both physically and emotionally, leading to most residents neglecting other clinical duties just so as to facilitate the BBN. It is a challenge to us but our dedication to our work is unchallenged."

Lack of BBN training

"*Our curriculum currently does not have a unit on BBN, the few residents who have training probably got the training from overseas universities or privately. Both MbChb and MMED doesn't train on the process of BBN"*

"From experience a colleague who was trained in Canada where they have BBN training finds it very conducive considering the training she received to deliver bad news to patients and their next of kin"

"There are institutions where the residents are trained on the SPIKES model and they are actually confident on BBN issues and undergo less psychological torment"

Fear of unexpected reaction from patient or next of kin

"*I once received a very negative reaction from the next of kin whose patient was diagnosed with stage 4 colon cancer, the caretaker was hysterical called me names and said I was responsible for his patients illness and that I will be responsible if anything happened to their patient"*

""This is a situation that actually puts us as medics in a very difficult spot, hence us requesting some dialogue on this issue. BBN is very complex I'm sure to the knowledge of whoever will receive this information. We love our work and would wish our patients all the recovery they can get from us, but the BBN issue is an entity that cannot be ignored".

Fear of being blamed

Majority of the residents interviewed after filling the questionnaires found it hard to break bad news for fear of being castigated one respondent had this to say

"We have these mortality meetings that are usually done regularly. During these meetings the people who were with the patient or are responsible for care of the patient are put under a lot of investigation which actually ends up stressing someone to te point that you feel like you let the patient down"

Another resident had this to say:

"At times you go to give news to the patients family and they break down even before you give them the news. At times you might find more than one bad news to deliver this actually makes one feel depressed and wonder did I choose the right career? Which makes you end up blaming yourself"

"It is imperative to realize the psychological torment on the patient, or the next of kin, if fear of demise is imminent. This same psychological torment is what we go through as medics, but as we specify, our job is our dedication , as suggested, training will be of paramount importance.".