Emotive responses to ethical challenges in caring

Citation for published version:

Digital Object Identifier (DOI):
10.1177/0969733013487191

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Peer reviewed version

Published In:
Nursing Ethics

Publisher Rights Statement:

General rights
Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.
Emotive responses to ethical challenges in caring: A Malawian perspective

Abstract

This paper reports findings of a hermeneutic phenomenological study which explored the clinical learning experience for Malawian undergraduate student nurses. Although the study revealed issues which touch on nursing education and practice, this paper mainly reports the practice issues. The findings reveal the emotions which health care workers in Malawi encounter as a consequence of practising in resource poor settings. Furthermore, there is severe nursing shortage in most clinical settings in Malawi and sometimes patients are not attended to, leading to what Hochschild (1995) coined as 'care deficit.' The results of the study also illustrate loss of professional pride among some of the nurses and the paper argues that such a demeanour is a consequence of burnout. However, despite these problems, the study also reveals that there are some nurses who have maintained their passion to care.

Keywords: emotional labour, burnout, professional pride, ideal nurse, compassionate care.

Introduction

This paper presents part findings of a study exploring the clinical learning experience of undergraduate nursing students in Malawi. Although the focus of the study was students’ learning in the clinical setting, it also revealed salient issues for practice in Malawi. The findings only reflect the students’ perspective of nursing practice but do not constitute their lived experiences. However, the findings are consistent with previous research.¹ ² The paper portrays challenges for nursing practice in Malawi. The study draws on Hochschild’s³ conceptual framework of emotional labour and discuss the identified issues from a perspective of emotions.
Background

Nursing is a caring profession and nurses are expected to provide compassionate care to patients. Caring is defined as 'the mental, emotional and physical effort involved in looking after, responding to, and supporting others' (p. 11). More often than not, the physical effort is noticeable; while the emotional effort is neglected. This is ironic because the emotional effort is crucial in providing compassionate care. Smith asserts that nurses have to work emotionally on themselves to appear to care, irrespective of how they personally feel about themselves, individual patients, their conditions and circumstances. Furthermore; she asserts that emotions are the key to connection with patients. Graham defines care as 'a concept encompassing that range of human experiences which have to do with feeling concern for, and taking charge, the well-being of others' (p. 13). Concern is vital in providing care to patients and to this end, Kottow maintains that the interaction of health providers with patients is especially dependent on the need to cultivate awareness and concerned care for the vulnerability consequent on the presence of disease.

Most government health care facilities in Malawi lack essential resources. In addition, the vacancy rate for nurses in Malawi stands at 74% reflecting the severe nursing shortage. The performance of clinical nurses is adversely affected because of the excess workload the shortage imposes on them and necessarily hinders health care personnel from providing optimal, effective and compassionate care to patients. The nursing shortage is mainly a consequence of the exodus of nurses mostly to the United...
Kingdom (UK). The National Health Service (NHS) in the UK specifically embarked on the recruitment of overseas nurses to lessen its own nursing shortage in the early 2000s. Gorman states that six hundred and eight Malawian nurse/midwives registered to emigrate within the period 2000 to 2007. This confirms the substantial loss of Malawian nurses leading not only to a 'brain drain,' but more importantly, a 'care drain.' Many African countries have been affected by such nurse migration but Malawi is one of the countries worst affected by the human resource shortage. Although in terms of the actual number of nurses who migrated, other countries surpass Malawi, but as a proportion of the available workforce, Malawi’s losses are significant to an extent that the human resource shortage is viewed as a crisis. The problem of nurse migration is now under control but its effects will persist for some time. Alongside nurse migration to the UK, even within Malawi, a considerable number of nurses left bedside nursing to work in non-governmental organisations which tend to have better remuneration than the public health sector thus further diminishing the number of practising registered nurses with all the consequences identified.

Staff shortages have an impact on the quality of health care, and also on the workload and motivation of existing employees. There is evidence that the current staffing of health care personnel is inadequate to maintain a minimum level of health care. Difficult working conditions and other related factors such as infrequent supervision and support, lack of essential drugs, supplies and equipment, limited career
opportunities, high and uneven workloads, lack of a clear deployment policy, inequitable access to training and inadequate housing all contribute to low morale and frustration.\textsuperscript{18,20}

The problems prevalent in health care facilities in Malawi do not only affect the provision of patient care, but also the education of health care professionals. These problems hinder the effective preparation of nursing students for their role as future nurses. They adversely affect the quality of their educational experience and this background set the impetus for this Malawian study.\textsuperscript{21}

**Methodology**

**Study Design**

A hermeneutic phenomenological approach was employed to explore the clinical learning experience for undergraduate nursing students in Malawi and the study setting was a university nursing college. Heidegger’s\textsuperscript{22} (1889-1976) and Gadamer’s\textsuperscript{23} (1900-2002) philosophical tenets underpinned this study. Heidegger believed that sometimes phenomena present themselves in a 'self-concealing' manner,\textsuperscript{24} implying that phenomena do not manifest themselves fully. He therefore, felt that phenomena cannot be simply described, but rather that phenomenology has to do with the seeking of hidden meanings. He felt that the appropriate way of seeking for meaning is the interpretation of text, which he believed manifests the hidden structures of a
phenomenon. Gadamer believed that Language is the universal medium in which understanding occurs. He viewed language as being uniquely placed and having the potential to reveal meaning and the world. It is for this reason that conversational interviews were conducted to obtain students’ accounts of their experience knowing that the narrative accounts would reveal their lifeworld. The paper portrays my interpretation of the practice issues which emerged from the students’ narrative accounts of their clinical learning experience. The findings are interpreted from a perspective of emotions, utilising emotional labour as a conceptual framework.

Sample
Third and fourth year undergraduate nursing students were purposively selected to participate in this study, assuming that they would ably articulate their experience being senior students. In a hermeneutic phenomenological study the sampling is purposive because participants are chosen based on their ability to provide rich descriptions of their experience. The sample consisted of thirty participants who were recruited through volunteering. Seventeen participants were female and thirteen were male and fifteen participants were drawn from each of the two cohorts where the study sample was obtained.

Data Collection
Conversational interviews were conducted to obtain the participants’ accounts of their
clinical learning experience. Initially, twenty-five interviews were conducted from the 19th of November to the 20th of December 2009. This is quite a big sample for a phenomenological study but this was done due to the delay in ethical approval of the research protocol which reduced the period for data collection. My initial plan was to conduct one interview per day but this was not possible. I had to interview as many students as possible, considering that some of the students had come to the end of their educational programme and accessing them would have been difficult. Five more interviews were conducted in March 2010 after realising that some of the emerging issues were not sufficiently explored. On average, each interview session took about one hour, but, some sessions lasted more than one hour thirty minutes.

Analysis
Data analysis was guided by an eclectic framework which was developed through modification of Colaizzi’s procedural steps for phenomenological analysis. The modification was essential because of some observed limitations. Indeed, Colaizzi recommends that his procedural steps can be modified as the researcher considers necessary. The observed limitations included failure to portray fully the important role that reflection plays in enabling the researcher to develop the meanings of the phenomena being investigated. The method involves extracting phrases or sentences that directly pertain to the investigated phenomena but phenomenological analysis of course goes beyond mere extraction of phrases. The phenomenological researcher
deeply engages with texts through reflection and gains insight into the phenomena being investigated.\textsuperscript{28} Equally, Colaizzi’s method does not overtly suggest that all understanding is dependent upon preunderstanding.\textsuperscript{29} Gadamer greatly upholds the importance of preunderstanding in facilitating understanding of the phenomena being investigated. Therefore, recognizing that Gadamer’s philosophical tenets underpinned this study, this was considered a significant limitation of Colaizzi’s steps for phenomenological analysis. The modified framework for analysis incorporated some ideas from other phenomenologists\textsuperscript{29,30} and these informed the additional steps taken.

Emerging themes were identified through line by line reading of the transcripts, and the reflective extraction of phrases or sentences that pertained to the phenomena being investigated. The analysis progressed in accordance to the guiding steps. However, the identification of themes did not mark the end of the analysis because in a hermeneutic phenomenological study, the role of the researcher is to interpret participants’ narrative accounts in order to understand the phenomenon being investigated. The interpretive phase was guided by Gadamer’s philosophical tenets.\textsuperscript{22} He believed that understanding can only be possible in the presence of historical awareness which he referred to as prejudice or preunderstanding. He believed that one should have a pre-understanding of the phenomenon before one can attain its meaning. Gadamer further asserts that understanding occurs through fusion of horizons and Koch\textsuperscript{31} gives a clear picture of what this might mean by stating that in a hermeneutic inquiry, data generated by the
participant is fused with the experience of the researcher and placed in context. This is a critical and reflective process\(^{32}\) and involves moving from the text, which reflects the participants’ horizon or perspective, to the researcher’s horizon, which largely constitutes one’s preunderstandings. I used emotional labour\(^3\) as a conceptual framework or a basis for my preunderstandings and against which the participants’ narrative accounts were interpreted. For this reason, the paper substantially focuses on emotions.

Emotional labour involves 'the induction or suppression of feelings in order to sustain the outward countenance that produces the proper state of mind in others of being cared for in a convivial safe place' (p. 7).\(^3\) Emotional labour has to do with the emotions and thoughts that nurses feel inwardly but they cannot express them in practice (Huynh et al 2008).\(^{33}\) I conceptualise emotional labour as the internal regulation or management of emotions which takes place when an individual perceives a mismatch between the inner emotions and the expected emotions to be displayed. Mann supports this stating it is the emotional dissonance which leads to emotional labour.\(^{34}\) Emotional labour is invisible unlike the visibility of physical care but it is still labour in the sense of hard work.\(^{35}\) Organisations such as that seen in health care are emotional arenas\(^{36}\) and therefore emotional labour is inevitable. Hochschild claims that emotional labour takes place through surface or deep acting which raises questions about the authenticity of the emotions which nurses display in such cases. However, I concur with de Raeve who
argues that this is problematic, asserting that that a nurse’s efforts in managing emotions could have nothing to do with acting, whether 'deep' or otherwise.\textsuperscript{37}

**Research Ethics**
Ethical approval for the study was obtained from the ethics committee at the School of Health in Social Science (University of Edinburgh) and locally in Malawi, from the College of Medicine Research and Ethics Committee (COMREC) of the University of Malawi. In addition, verbal and written consent were obtained from individual participants.

**Findings**
The findings reveal issues which touch on both nursing education and practice. However, this paper reports only the identified practice issues. Three main problems contribute to the emotive nature of nursing in Malawi. These include the lack of essential supplies, the severe shortage of nurses and negative attitudes which some clinical nursing staff display towards patients. The paper reflects how these problems contribute to the emotive nature of nursing in Malawi. The findings are presented under the following themes: the emotional dimension of practising in resource poor settings, disillusionment with the way nursing is practised, and nurses who care.

**The emotional dimension of practising in resource poor settings**
Nursing students in Malawi gain their clinical practice experience in resource poor
settings. Sometimes, the lacking resource may be an essential drug required to treat a patient with a life threatening condition. At times, death of a patient occurs and the study findings reveal the emotions which such a situation can arouse for those providing care. Participant # (St-5-M-4) described it this way:

The issue of resources, it’s not an issue that you can just talk about. It’s an issue that you can even feel, and I have ever seen several situations in a hospital where even lives are lost because you don’t even have resources ...... So if you don’t have the resources it’s so stressful and when you stand there with your knowledge, your skills, everything but you can’t do anything and it’s so stressful.

Furthermore, nursing students practise in clinical settings characterised by severe nursing shortage and the study findings portray a high nurse-patient ratio. Participant # (St-8-F-4) narrated the following account:

My observation has been that the number of nurses versus patients sometimes doesn’t balance ..... So you find that the care you give is not holistic care ..... You would want in your heart that I want to give ah all holistic care but you won’t manage.

Participant # (St-15-F-4) also expressed similar sentiments and she had this to say:

You have so many patients ..... instead of doing total nursing care, you are trying to help each and every patient and then at the end you miss out to help other patients because there are just too many of them.

As a result of the high nurse-patient ratio, the study findings reveal that the nursing care delivery system is task centred. On this issue, participant # (St-14-F-4) made the following comment:

When you go to the ward, you concentrate on your task; you don’t look at the patient like comprehensively. So it doesn’t give a good picture to clinical
learning and we don’t learn much what concerns nursing.

All these factors do not only affect the provision of care, but also negatively impact on students’ clinical learning. The quality of their learning experience is compromised because of the nature of their clinical learning environment.

**Disillusionment with the way nursing is practised**

The students’ accounts portray disillusionment with nursing in Malawi as it is practised by some of the nurses. There is a tendency among some of the nurses to shout at patients and display negative attitudes. Participant # (St-10-F-4) expressed the following sentiments:

> But there were other nurses that you actually say this person, how did she manage to become a nurse? ..... They were just there to fulfil their job as a nurse, but not to have personal relationship with clients. They could shout at a patient on a simple thing.

One striking aspect is that the nurses tend to shout at patients over simple matters and participant # (St-23-F-3) also expressed similar concerns and she had this to say:

> Those nurses who like shouting, most of the times clients are in pain either emotionally, psychologically or physically and its real pain, ..... but you will find that other nurses when they are asked even if it’s a simple matter that they would have just said yes or no, they will start shouting. Those nurses, don’t do good to the clients because they just add pain on them.

Participant # (St-28-M-3) narrated the following account which also reflects the students’ disillusionment with the way nursing is practised in Malawi by some of the nurses and he had this to say:
The other thing I have learnt is the spirit of most of the nurses, maybe, not only nurses but health workers ..... I think their spirit or their approach or their attitude towards patients is not what I thought it is ..... At first I thought nurses are more or less like angels..... It saddens me when I see a health worker well trained... mishandling the patient or having a very poor attitude towards the patient, that of course disturbs me because we appear to be angels and we are expected to be one.

The findings also reveal negligence among some of the nurses. For example, students reported of nurses just sitting in the nurses’ station in busy wards, which obviously implies that patients are left unattended. Participant # (St-21-F-3) described it this way:

They were seeing us; we were busy, even failing to have a break .... If you leave you will find the patients not attended to.

The situation seems to be worse during night shifts because some nurses actually sleep on duty and participant # (St-23-F-3) had this to say:

During the night you will find that nurses are just sleeping. They can sleep at 9:00 pm and they would wake up at 6:00am.

There is evidence that some nurses even lower the flow rate of intravenous infusions during a night shift in order to have a 'peaceful night' and participant # (St-10-F-4) described it this way:

Sometimes you are on day duty and the nurses coming on night duty, they could even talk as if it’s a good thing that when they want to have a peaceful night duty they will just minimise all the litres [flow rate for intravenous infusions] ..... so that they should last the whole night up to the morning, and to them you could see that they felt as if there is nothing wrong with it.
The issues presented reflect some unprofessional conducts among Malawian nurses and the findings indicate that commitment and compassion seem to be lost virtues.

**Nurses who care**

Although the findings in this study portray a poor nursing image in Malawi, the study participants also reported that some nurses demonstrate commitment and compassion. The following account which participant # (St-10-F-4) narrated illustrates this:

Some of the nurses are very caring; they are concerned about patients. There are nurses who even when they go home they would call to ask how that patient … is so you could actually see that this person has got a connection with the patient.

Such nurses encourage and motivate nursing students and another narrative account which participant # (St-10-F-4) gave portrays this:

But when you go there [clinical area] and find a nurse who is polite … who has love for patients. When she talks to a patient you could actually see that this person actually has love for the patient. When you see those nurses you are motivated, you say, ah I would like to be a nurse like this one … If I work like this maybe I will also change the image of nursing.

Similarly, participant # (St-23-F-3) had this to say:

There was another nurse who encouraged me very much … She was pregnant by then, almost fully term pregnant but she could work very hard … you look at her; you wouldn’t want to sit down. … She is pregnant instead of resting she was always on the move doing something for the patient and she could listen when the patient says I am feeling this, she could understand. … That in-charge encouraged me so much that if all nurses were like her, nursing would have brought a good image to the outside people.

While some of the nurses seem to have been affected either by the prevailing labour
situation or personal problems, the study reveals that some may have personal problems but these do not affect their work performance, they passionately take care of patients.

Participant # (St-27-F-3) had this to say:

There are some people [nurses] who’ve got caring at their heart. They can have problems at home but when they are coming from home, coming now into the ward, they will leave the problems at the door of their homes and then they will meet the clients in the ward and they will not carry their problems. Now when you meet such kind of a nurse, you learn a lot.

The presence of such nurses gives a sense of hope for the nursing profession in Malawi and it just confirms that nurses can still care.⁴

**Discussion**

The findings in this study portray the emotions which nursing students in Malawi experience when death of a patient occurs due to scarcity of essential drugs. Their narrative accounts illustrate that the distress which such clinical encounters aroused was quite substantial. These findings also portray helplessness which nursing students encounter because they could not do anything to avert death of a patient. These findings are consistent with Maluwa et al who revealed moral distress among practising nurses in Malawi, caused by lack of supplies and essential drugs and medicines.⁸ James revealed that emotions such as grief, anger, loss, despair and frustration in family members and relatives are anticipated and considered as appropriate responses in coming to terms with death.³⁵ Nevertheless, she also revealed that the expression of such emotions is difficult to watch, and awkward to respond to. Arguably, similar difficulty is
experienced by nursing students in Malawi as they watch patients die knowing that such deaths could have been prevented.

The study also portrays loss of professional pride among some of the nurses as evidenced by their apparent lack of commitment, negative attitudes and, distressingly, tendencies to shout at patients. Some of the nurses seem to have become desensitised to human suffering evidenced by the uncaring attitude which they display. They seem to have lost the passion to care with which they joined the profession. With the severe nursing shortages in Malawi, to be truly caring is difficult to achieve and might not even be expected. However, I would argue that the reported unprofessional conducts have a signal function. Pearcey asserts that when caring stops 'mattering' to nurses a crisis in nursing will truly arise.\(^3\) It entails, then, that the findings in my study lend support to this and reflect a typical crisis within the nursing profession in Malawi.

The patient’s world can be quite frightening and it is the nurses’ responsibility to instil hope and reassurance. It is for this reason that nurses are said to enter into ‘caring conversations with suffering others’\(^3\) Scheper-Hughes and Lock indicate that societal and cultural responses to diseases like AIDS create a second illness in addition to the original affliction and they call this a double illness metaphor.\(^4\) I would argue that shouting at patients as is the case in Malawi, also causes affliction on the patient besides the suffering caused by the illness. Consistent with Fredriksson and Eriksson, it is worth asking, 'How should the nurse engage in caring conversations with suffering others' (p.
They assert that the caring conversation entails that one person, through the ethos of 'caritas,' makes room for a suffering person to regain his or her self-esteem. This implies that the nurse-patient interaction should empower patients and not demean their self-worth.

Surprisingly, nurses who shout at patients are provoked by trivial matters and I would argue that such conducts speak volumes about their feelings. Maben claims that most nurses join the profession motivated to provide compassionate care to patients and it is argued that any departure from such a professional demeanour might suggest the possibility of an underlying problem. Hochschild claims that emotion communicates information; it has a signal function and reflects a buried perspective on the matter. Shouting at patients reveals a possibility of tension, stress and unmanaged emotions. Maslach defines burnout as a process in which a professional’s attitudes and behaviour change in negative ways in response to job strain (p. 31). Job strain is a possibility among Malawian nurses because of the severe nursing shortage and I would argue that shouting at patients may be a consequence of burnout and Grigulis confirms its prevalence.

However, shouting at patients reflects emotional deviance which according to Sakiyama, occurs when care workers cannot exchange 'good' or 'warm' feelings with clients. Hochschild, in her seminal work on flight attendants, rightly claims that for flight attendants, smiles are part of their work, a part that requires them to coordinate
self and feeling so that the work should seem effortless. She further claims that part of the job is also to disguise fatigue and irritation in order to ensure customer satisfaction. She indicates that such a feat calls for emotional labour. Some similarities can be drawn between flight attendants and nurses, in that they are both preoccupied with caring in one way or another. In either profession, negative emotions can significantly affect the care they render. Hochschild clearly portrays this similarity by stating that 'most of us have jobs that require handling other people’s feelings and our own, and in this case we are all partly flight attendants' (p. 11).

Vital lessons can be learnt from Hochschild’s work on the flight attendants. Shouting at patients reflects the failure to disguise fatigue and irritation and emotional labour can go a long way in helping nurses in Malawi to manage emotions that arise due to their labour situation. Mann claims that by engaging in emotional labour, the nurse directly impacts on patients’ psychological and physical well-being and their recovery. Correspondingly, Mazhindu revealed in a study that controlling emotions is central to the ability to appear as an 'ideal nurse'. She also claims that acting out of the social construction of an 'ideal nurse' is essential in order to remain calm, sensitive and understanding and helps nurses to behave in a socially acceptable manner, befitting for professional nurses. Henderson asserts that emotional engagement is perceived as a requirement for excellence in nursing practice and a situation where nurses appear to have no feelings and no concern for patients must be disconcerting.
Shouting at patients is contrary to what is known about Malawian people. Malawi is often called the 'warm heart of Africa' because of the gentleness and the friendliness of the people.\textsuperscript{46} Malawians are a friendly and smiling people and Tembo supports this and states, 'it is such wide smiles that Malawians are blessed with that make the country home to everyone'\textsuperscript{47} Would one not expect to find smiling nurses within Malawian Hospitals? The late president, His Excellency Bingu wa Mutharika named Malawian nurses angels\textsuperscript{48} and this portrays what is expected of them.

Although the nursing image seems to have been tarnished, this study reveals that some nurses in Malawi are committed and caring. These are nurses who have maintained their passion to care and demonstrate resilience despite the prevailing labour situation. What then are the implications of the study findings? Can Malawian nurses still care? I would contend that the presence of caring and committed nurses conveys a sense of hope for the nursing profession in Malawi. This can be the starting point for the restoration of professional glory and the passion to care among the nurses. Smith claims that nurses can still care but effort, skill and organizational support are required.\textsuperscript{4} Furthermore, Smith indicates that compassionate, committed and emotionally sensitive leadership is required to have compassionate and smiling nurses as this is a gesture of care for those who care.\textsuperscript{4} This is an area which needs to be seriously considered by nursing leaders in Malawi as evidence suggests that there is infrequent supervision and support.\textsuperscript{6,18}
Shouting at patients is common in Malawian hospitals and it indicates failure to manage emotions. Nurses therefore need to learn how to manage their subjectivity in a way that promotes caring and compassionate conduct and this requires that they should learn to manage their emotions. Although emotional labour has a potential to positively impact patient care, its negative consequences are well documented. It causes estrangement between self and true feelings and burnout. Furthermore, intense or continuous emotional work can be stressful and exhausting. Nevertheless, I would argue that the benefits of engaging in emotional labour outweigh its limitations. However, the interventions suggested may be relatively powerless if there is not enough human resource. Catton argues that “numbers matter” … “There is a critical point below which you are virtually guaranteed poor care.” It is, to a significant degree, the shortages that lead to the inability to both care and manage emotions.

Conclusion

Three main problems contribute to challenges which affect the nursing profession in Malawi and these include the lack of essential supplies, the severe shortage of nurses, and negative attitudes which some of the nurses display towards patients. Sometimes, indeed, patients are communicatively mistreated, quite contrary to the ethic of caring. Some alarming accounts about nursing in Malawi have been discussed and these indicate loss of professional pride and a possibility of burn out. Nevertheless, all hope is not lost. There are some nurses who have maintained their passion to care despite all
adversity. Compassionate, committed and emotionally sensitive leadership and emotional learning are required. Therefore, there must be hope of restoring the passion and compassion to care among Malawian nurses and the paper argues that this can be achieved through emotional labour.

References


16. Muula AS, Penulo B, and Maseko FC. The financial losses from the migration of nurses from Malawi. BMC Nursing 2006; 5:9


32. Freeman M. Performing the event of understanding in hermeneutic conversations with narrative texts. *Qual inquiry*, 2007; 13: 925-944


38. Pearcey P. Caring? It’s the little things we are not supposed to do anymore.' *Int J Nurs Pract* 2010; 16: 51-56.


41. Maben J. Healthcare staff need more support from employers. *Nurs Times* 2009; accessed on 02/03/2012 available at http://m.nursingtimes.net/5001835.article


43. Sakiyama H. when emotional labour becomes 'good' the use of emotional intelligence. *Int J Work, Organisation and emotion* 2009; 3(2): 174-184


46. Glasson GE; Frykholm JA; Mhango NA and Phiri AD. Understanding the earth
systems of Malawi: ecological sustainability, culture and place-based education 2006, 

47. Tembo W (2011) A smile from the warm heart. The Malawi Project 2011, accessed on 30/05/11 available at http://www.malawiproject.org/?s=Smiles+from+the+warm+heart

48. National organisation of nurses and midwives (undated) accessed on 05/06/2011 available at http://www.flickr.com/photos/15785213@N08/3660140398/
