

EXPANDING CARE FOR CHILDREN WITH CANCER IN A MULTI-CULTURAL
HOSPITAL: ETHNOGRAPHIC OBSERVATION ON A PEDIATRIC ONCOLOGY
WARD IN TANZANIA

by

TARA SULLIVAN

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Approved: _____



Melissa Graboyes, Ph. D. MPH
Program in African Studies
Department of History
University of Oregon

The purpose of this anthropological research is to understand the modern illness experience of childhood cancer in Tanzania. I conducted field research by direct observation of a children's cancer ward in the fall of 2012 while serving as an intern for a Tanzanian childhood cancer support organization. This thesis specifically examines methods of communication between medical practitioners and children and their families; pain expression and alleviation for the patients; and the individuals and groups that provide support. The results found that challenges in communication stem from unwieldy but necessary linguistic and cultural translation due to the multi-cultural nature of the ward. When verbal communication fails, volunteers, therapists, and doctors use acting and visual images to more effectively communicate with the children. Children also learn appropriate ways to express pain from their surroundings, so as they grow they communicate pain in a culturally appropriate way. Relieving pain is also a challenge because palliative care in Tanzania is severely lacking, so medical practitioners explore creative approaches to alleviate both physical and emotional pain. Families and local actors help children navigate their treatment while at the children's ward, and simultaneously local and international bodies provide the infrastructure, salaries, and medications. Ideally Tanzania would create a pediatric oncology training program, build more facilities, and improve access to treatment and palliative care options. The advancements made in the last decade, and the continued efforts being made currently, gives each child a better chance of survival to a life cancer free.

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Day One

September 7, 2012

After jumping on and off multiple buses through the hot city of Dar es Salaam, Tanzania Emma and I finally arrived at Muhimbili National Hospital, over an hour late. The children's ward is tucked in the back corner of the giant hospital complex. We walked past several other wards before we got there. Outside a big sign read, "Jenga la Watoto" (Children's Ward) painted rainbow colors. I called Jill, the administrator, as we stood in the entrance way. She met us in the large foyer and led us past walls full of colorful murals painted of animals, Barney, Tom and Jerry, and other famous cartoons. We walked downstairs and outside to where the younger children were doing their play therapy with fruit. As we approached there were about seven toddlers sitting on a big straw mat. There we met Lily the play therapist, a tall woman with red curly hair and light skin. She explained to us that she is from Ireland, but has been living in Tanzania for about three years now.

Jill then led us to the classroom on the second floor. The room seemed to have been converted from a conference room. There are two large mats on the floor in the front and a television sitting at the front on an old desk. In the corner opposite the door, toys are stacked up along the wall. The back half of the room is filled with blue chairs that are all stuck together in rows. They reminded me of chairs found inside an airport terminal. The back of the room is lined with etched windows that let natural light through and has a large air conditioner blasting cool air in the room. Along the wall of the door there is a white board with math problems on it. In this room we met three teachers who were all Tanzanian. Inside this classroom there was about ten children, playing and working with the teachers on different projects.

Next, Jill and Lily guided us to the third floor of the hospital. Lily gave us a box of juice to pass out to all the children. The third floor is where the beds of the ward are located and the windows and doors stay open to keep the hot air circulating. The children lay on their beds and their mom or dad sit beside them. Some children are obviously very sick, sleeping on their beds with their mouths wide open and a catheter in their arms. We began passing out juice in the first room where most of the children are in advanced stages of cancer. Then we walked down the hall continuing to pass out juice to families, the room is filled with smaller children and their moms. The room is darker and quieter than the other. The next room on the right has only three beds in it. The following room is the isolation room which is constantly supposed to have the door closed, making the air in that room extremely warm. Then there are two rooms that have about eight beds. Not all of these beds had children, in which I assumed the children who occupy some of those beds are in the classroom downstairs.

The last room on the right is the chemotherapy room. I just peaked in to see a nurse with a syringe and vials. Moms with their children stood outside this room in the hallway waiting to give their child treatment. At the end of the hall a nurse sits at a small desk to check in outpatients. In six or seven chairs, moms and the children wait to receive their chemotherapy treatment, before they return home. We gave juice to all of these children too.

We returned to the classroom where the play therapist, Lily, was doing an exercise with music that had the kids dancing and running about. After about ten minutes Lily left for the day, so the teachers asked Emma and I to act as DJ's using the CD that Lily left behind. Then they said they were going to go downstairs, and mysteriously left us with a room filled with ten children with cancer. I felt panicked because we had no idea when the teachers would come back. There were two children who were missing a leg, but still managed to hop around quite well and several sleepy girls sat in the blue chairs probably very sick from chemotherapy. The immediate problem was a few rambunctious boys who kept running around the room; I feared they would run into another child.

At first Emma and I thought we should try to play a game with them but most of them did not speak English, and I cannot successfully lead a game in Swahili. Even when we tried to tell the children to sit in Swahili they wouldn't listen. "Kaa kaa" (sit) we said, and they just kept playing. Remarkably the room calmed down as everyone found a puzzle or book to look at as they sat on the mat. I found some legos and built a car with one little boy as we sat on the mat together looking at a picture of how to construct a lego car. Some of the boys came up and talked to me as I did this. I tried speaking to them in Swahili, but I think they had a hard time with my accent. About fifteen minutes later the teachers returned. Luckily no one had any problems while they were gone. Leaving to get lunch, we said we would see them next week marking the end of day one at our internship at Muhimbili Hospital.

Chapter One: The Situation

Cancer has plagued human kind for thousands of years. The earliest case of cancer was found by researchers in southeastern Africa in a preserved body from 4000 BC and carries signs of a lymphoma (Mukherjee 42). Thousands of years later cancer is now one of the leading causes of death worldwide. According to the International Agency for Research on Cancer in 2012 eight million two hundred thousand people died of cancer globally, with a growing number of cases emerging in developing countries (*Globocan 2012*). The burden of tropical diseases on many African societies has pushed cancer to the background in public health initiatives. But as life expectancies grow and cancers related to HIV and other infectious diseases emerge, cancer has become increasingly prevalent in many sub-Saharan African countries. Health ministries and international organizations are currently advocating for better care and more resources to be channeled toward cancer patients in Africa. While this disease may be one of the oldest, finding appropriate treatment- let alone a simple cure- is one of the greatest challenges for modern medicine today.

Tumaini la Maisha

In 2011, the first and only non-governmental organization (NGO) for children with cancer in Tanzania was founded. This organization is called *Tumaini la Maisha*, “Hope for Life,” which began to support children who suffer from cancer and their families with the financial help from Children in Crossfire, an international charity. Phillip, a local teacher, started volunteering at Muhimbili with the children in the 2000s, and he largely inspired the support program at the hospital. With funding from

international charities, *Tumaini la Maisha* provides the children who are receiving treatment with a classroom for independent studies and play therapy, and also pays salaries for three teachers and the play therapist. They also organize day trips for the children's amusement and spread awareness and advocate for childhood cancer.

Tumaini la Maisha is the only Tanzanian NGO for children with cancer (Farrell *Interview*). It was with this organization that Emma, another American Student, and I completed an internship in the fall of 2012, in which we spent a total of sixty hours while at the cancer ward. We spent every Tuesday and Thursday morning there tutoring and playing with children in the classroom and the hospital floor. During my time interning at Muhimbili Hospital, I wrote extensively in a journal about my experience and all of the different interactions I witnessed.

While spending four months visiting the pediatric oncology ward twice a week, I was able to observe and reflect on the daily happenings. By being immersed in the hospital, I learned about the culture that was constantly present throughout the ward. When participating in a service learning internship, I took on a participatory role in the culture (Emmerson, Fretz, and Shaw 4). The participation and study of a group of people as they go about their everyday life is considered ethnographic research. When writing notes, an ethnographer draws upon her participation in an initially unfamiliar social world (Emmerson, Fretz, and Shaw 1). By participating, observing, questioning, and reflecting on my experiences and keeping detailed notes in a journal, I created a 22 double-spaced document of ethnographic observations of the pediatric oncology ward. I was then ready to embark on an anthropological consideration of pain, communication, therapy, and support in an urban borderland inside the Tanzanian city of Dar es Salaam.

Ethnography of Childhood Cancer

The ethnographic field notes illustrate my experience as an intern. Volunteering in the classroom and the ward, I became friends with the children and the teachers. My basic Swahili skills allowed me to serve as a tutor for the children and to develop fledgling relationships. I interacted with some of the doctors and the nurses as I sat with the children in their beds. While performing these tasks, I also took direct observations of the daily happenings in the cancer ward which has provided valuable material to this thesis. In addition to my experiences and observations with the children on the ward, I interviewed in English the director of *Tumaini la Maisha* as a way to learn about the history of the organization and its main goals. While in Dar es Salaam, I also interviewed in English the directors of the Tanzania Breast Cancer Foundation and the Fifty Plus Campaign for Prostate Cancer. Collectively, these interviews gave me a basic understanding of how cancer is perceived and thought of in Tanzanian culture. My field notes and the interviews constitute the primary set of data and materials I draw upon for this research.

One limitation of this work is due to the short amount of time I spent at the hospital, and my inexperience as an ethnographic participant-observer. I only spent a total of sixty hours at the hospital, and I have limited knowledge of medicine and biology, so some of the conditions and terms were unknown to me. My primary purpose for being in Tanzania was not to spend long hours in the ward, but to take classes at the University of Dar es Salaam and do cultural excursions around the country. My internship was just one part of my study abroad experience in Tanzania. In addition, there were certain areas of the cancer experience that as a foreign student, I did not have

access too. For example, I did not observe the doctors giving diagnoses, nor did I talk to the families about their religion. Prior to this research I had no background with anthropological research so I learned the ethnographic method as I participated and reflected on my experience. As a way to supplement my own field notes and observations, I draw upon the growing anthropological literature related to cancer in Africa. While completing this secondary research, I also learned the fundamentals of medical anthropology which gave me a deeper perspective on my own research.

Throughout this thesis I have used pseudonyms for all of the children, teachers, and therapists I refer to in order to protect their identity. I refer to Dr. Trish Scalan as Dr. Trish throughout the work because that is how she is called by the children and staff at Muhimbili Hospital and I believe she deserves an enormous amount of credit for all of her time and effort. I also make reference to Emma my dear friend and colleague who put in the same amount of time and hours. One day Emma hopes to return to Muhimbili Hospital as a doctor herself. The pseudonyms I do use are not meant to detract from the efforts of these individuals or the strength of each child, for I hope to communicate this important point in this work.

Understanding the illness of childhood cancer in Tanzania, not just the disease, is the primary goals of this thesis and to understand the illness as a lived experience, I present this research in three thematic areas. The first is focused on the types of communication—spoken and visual---utilized in the pediatric oncology ward. My focus on communication includes analyzing how a diagnosis is given, issues around linguistic and cultural translation, how health care providers teach children to communicate their physical experience, and the adoption of physical imagery such as cartoon characters

cross-culturally. The next thematic area is pain and relief for the children in the ward and the focus is on how children express their pain, how pain is socialized in the ward, and the palliative care of the body and mind for children. The final thematic area describes support systems that the children rely on in the cancer ward, which include families, local community, and international organizations.

Cancer as an Epidemic

The historical, political, social, and biological context of childhood cancer in Tanzania is necessary to understand the complete illness experience. Globally over the last six decades, tremendous advances in biomedicine have allowed for most childhood cancers to be cured. Biomedicine is currently the most popular form of medicine practiced worldwide and focuses on the biological cure of the body (Kleinman “What is Specific” 25). For cancer treatment this includes the use of chemotherapy, surgery, and radiation therapy. In 2009 these treatments cured approximately 80% of children diagnosed with cancer in Western Europe and North America. However, about 85% of children with cancer reside in low-income countries because of tumors related to HIV-infections and other diseases such as malaria that can lead to certain types of cancer (Finlay and Carroll 3). Tanzania exemplifies these rising rates and awareness of cancer. Cancer care in Tanzania began with the foundation of the Ocean Road Cancer Institute (ORCI) by Parliament in 1996. The ORCI in Dar es Salaam advocates for better treatment and prevention measures but the data shows the need for further support for cancer patients (Sloan & Gelband 316). Prior to efforts in the last decade, children’s cancer survival estimates were between five and ten percent. Recent efforts from the Ministry of Health and non-governmental organizations moved one-year survival

percentages to roughly 60% (Scalan & Kaijage 704). Many obstacles to receiving care and the lack of resources in hospitals challenge Tanzania in their efforts to treat cancer.

Diseases such as malaria, HIV/AIDS, and other infections that have higher prevalence in Africa, can lead to certain types of cancer and higher proportions of cancers that are not as prevalent in Western countries.¹ In sub-Saharan Africa there are more cancers caused by viral infections (Vastag 110). For example, Kaposi's sarcoma and non-Hodgkin's lymphomas are found in alarmingly high proportions amongst young adults who are HIV positive (Dittmer & Krown vii). UNAIDS estimated in 2012 that about 1.5 million people in Tanzania are living with HIV, which amounts to some of the highest numbers in the world ("United Republic"). Another type of cancer more prevalent in Tanzania is Burkitt's lymphoma. This is one of the most common types of childhood cancer in Central Africa and is known to be linked to malaria and Epstein-Barr Virus. Children living in malaria-endemic areas such as Tanzania, have a higher risk of developing Burkitt's lymphoma (Chêne et al np). Many doctors and scholars are calling for more research on specific cancers in sub-Saharan African countries to better address the growing frequency of cancer.

In addition to these scientific differences, the social and economic differences between Western countries and developing countries must also be considered. For instance, many developing countries do not have regular screening programs that are well financed and easily accessible. The lack of screening leads to about 75% of cancer diagnosis being made in the late stages of the disease—making treatment options limited and survival unlikely (Vastag 1106). The cost of treating childhood cancers is

¹ Western Countries refers to the US, Canada, Western Europe, and Australia

also expensive even with the gains in technology and unlikely in poor countries like Tanzania. Healthcare systems that are already under extreme economic pressure struggle to address the health needs of children without diseases like cancer, leaving children with cancer even more under-served (Craft 386). Through expanded screening efforts, more treatment facilities, and increased resources for patients cancer survival in Tanzania can advance, but these activities remain unlikely in the near future because they would require vastly more funds than the government currently spends on health care.

Historical Background

Historically in East Africa, cancer was treated by local healers utilizing a variety of different methods. In East Africa *mganga* is a healer that employs magic, herbs, bone setting and divination to treat both bodily injury and also non-medical problems (Graboyes 5). In Kenya, the Luo people have traditional healers that would perform some surgeries and prescribe herbal medicines for a variety of different diseases (Kawango 91). If a tumor was visible traditional healers could remove it with surgery, using herbs as an antiseptic (Bosire *Interview*). Children's illness would often be attributed to factors such as ancestral spirits, inheritance, or the breaching of taboos (Kawango 91). An "evil eye" would often explain infant mortality and childhood illnesses, and then herbal medicines, traditions, and sometimes surgery would be prescribed to treat these diseases (Bosire *Interview*, Kawango 91). Before the introduction of biomedicine in the 1880s with European colonization, healers had different ways of responding to cancer as an illness. The establishment of biomedical care from the Western world has merged with some of these local beliefs.

Local and foreign practices, related to health and disease, coexist in a pluralistic health system in East Africa today (Good 2). Medical beliefs in East Africa blend different types of treatments such as Islamic and local ideas of witchcraft, along with biomedicine in a very syncretic way (Graboyes 3). In cancer treatment, traditional medicine provides important palliative care and can help to create a positive environment for patients. The cooperation between biomedicine and traditional medicine can have tremendous benefits and opportunities for treatment, although true cooperation is rare (Good 286). Currently, the pediatric ward in Dar es Salaam focuses on the biomedical treatment of cancer through chemotherapy and surgery.

A Single Pediatric Oncologist

Since 2008, Dr. Trish Scalan, an Irish woman, treats children tirelessly at the pediatric cancer ward in Dar es Salaam. Currently this is the only children's cancer facility in Tanzania, although rumors speak toward another opening in the western city of Mwanza. While there are other pediatricians and oncologists in the country, Dr. Trish is the only trained pediatric oncologist at the present time. She speaks Swahili fluently, and is able to speak directly with her patients and their families. Her staff consistently changes as visiting doctors come through the ward, and yet the advancements that have been made under her care are incredible. Under her direction, government support has grown, international donations have increased, and long-term survival rates have most likely improved, although the statistics do not exist to prove that definitively (Farrell *Interview*).

Until the last decade, most Tanzanian children with cancer passed away because of the inability to access biomedical treatment. Each year there are an estimated 2,200

new cases of childhood cancer in the country. The Tanzanian Ministry of Health pledged to provide all cancer services free to its citizens, which has technically made care available to all citizens. However, significant barriers still exist for every child or person with cancer receiving treatment because families must fund their entire transportation and living costs in Dar es Salaam in addition to being away from their jobs and families for extended periods. In 2004 the first seventeen bed pediatric oncology ward was opened in Dar es Salaam, the largest city in Tanzania (Scalan & Kajaige 705). The pediatric oncology ward was originally at the ORCI in Dar es Salaam, but was moved to Muhimbili National Hospital with the intention of integrating the children's oncology ward with the general pediatric ward (Farrell *Interview*). Children in Crossfire, a charity based in Northern Ireland, and the International Network for Cancer Treatment and Research (INCTR) began giving funds, equipment and drugs to the pediatric oncology ward in 2009 (Scalan & Kajaige 706). With these advancements Dr. Trish reported in 2012, "one-year overall survival has improved, from 25% in 2005 to 60% in 2009, so in clear, measurable terms the situation is improving dramatically" (Scalan & Kajaige 706). In 2013, with funds from the Rotary Clubs in Dar es Salaam and Bank M, a new children's cancer ward was completed. The ward now has 400 square feet with 23 beds, an isolation room, and piped oxygen for children needing intensive care ("Rotary"). Children in Crossfire helped to open a new hostel facility for children and their parents to live at while completing treatment ("Cancer Care"). These improvements give doctors and families increased possibility to access care in Dar es Salaam, and hope for successful recovery from childhood cancer.

There are several types of childhood cancers in Tanzania that are predominant, and children face many challenges during treatment. Burkitt's lymphoma (BL) is the most common form of childhood cancer in Tanzania and throughout East Africa. Other common types of childhood cancer include retinoblastoma, acute lymphoblastic leukemia, and Wilms' tumor. With all of these cancers, there continue to be challenges of diagnostic difficulties, lack of essential chemotherapy, treatment and supportive care. There is often a delay in treatment with an average of seven months time period between initial symptom awareness and actual treatment because facilities are far away which causes a financial barrier for many families (Scalan & Kajaige 705). Some of the childhood cancers are easier to treat than others, but for biomedical treatment they all involve traveling to Dr. Trish's oncology ward at Muhimbili National Hospital.

Once at Muhimbili Hospital, it is evident that the hospital is a cultural borderland. Cheryl Mattingly defines a cultural borderland as an urban center or border zone that is "characterized by ethnic pluralism and a fast changing cultural scene" ("Pocahontas" 495). Mattingly's research is primarily with African American populations in the US, but the concepts that she develops can be applied to the hospital in Dar es Salaam. Like the urban hospitals found in Chicago and Los Angeles, Muhimbili National Hospital caters to an incredibly ethnically diverse population. As the only pediatric oncology unit in the country, people from Tanzania's multitude of ethnic groups (each with their own local language) converge in the children's cancer ward. Swahili has become the lingua franca in Tanzania over the last fifty years, but the amount of linguistic diversity can still be heard in the halls of the hospital (Lewis,

Simons & Fenning). These languages and cultures create a rich and complex borderland that must be traversed and navigated by all of its members.

Doctors and medical students visiting as part of their learning experience on global health, also called “clinical tourists,” are also constantly arriving to the ward. In the few months I was there, two Irish medical students volunteered on the pediatric ward as a part of their medical school program. The anthropologist Claire Wendland has written about the American clinical tourists who arrived and worked at a Malawian hospital. These clinical tourists were often seen as privileged and would excuse themselves from some procedures or pick procedures that were rare at home (Wendland “Moral Maps” 111). Wendland describes the hard facts of how knowledge, people, and technologies circulate unevenly between the global north and south: “scientific ideas circulate fast there; clinical tourists circulate readily from outside of Malawi but not the reverse; medical technologies circulate slowly, erratically, and sometimes not at all” (108). The imbalance of clinical tourists, and the additional challenges they could cause on the ward were also apparent to me in Tanzania. The medical tourists provide important expertise that was gained in their home countries but availability of this expertise was inconsistent. For this reason, I do not mean to describe these international doctors or medical students in a negative light; I believe they have good intentions, but I want to point out the many complications that arise with this trend.

The setting of the pediatric oncology ward changes the children’s experience while they undergo treatment. A setting include the observable, so in this case the clinical tourist, the cultural borders, the structure of the pediatric ward, and the types of cancers. Yet the setting also includes the historical and political structures that lie

beneath the surface of the setting. At Muhimbili Hospital's pediatric oncology ward this includes the development of cancer in Tanzanian culture, the use of traditional medicine, infectious diseases that lead to certain types of cancer, and the country's poverty that leads to lack of resources. All of these aspects create a distinctive setting that the children enter into upon receiving treatment at the ward.

Literature Review

The study of childhood cancer from an anthropological perspective relies on some theories explored by medical anthropologists concerned with the physical experiences of pain, illness, and how groups make sense of illness. Arthur Kleinman, a prominent medical anthropologist and psychiatrist, describes the culture systems of medicine that can be found throughout the world. The book, *Illness Narratives: Suffering, Healing, and the Human Condition*, draws on his experience with patients who suffer from chronic illness and he describes how disease, in this case cancer, is what the biomedical practitioner is trained to heal from a biological standpoint. Illness on the other hand, is the patient's entire experience of the disease, including the social relations and emotions that occur (Kleinman *Illness* 4-5). Kleinman also argues that the illness experience is culturally shaped based on how individuals think about and react to their own illnesses (Kleinman *Illness* 5). The idea of illness being shaped by culture has been developed by many other anthropologists, and while this literature has helped provide a contextual framework, I do not directly reference these works (Byron Good, Scheper-Hughes & Lock, Nichter, Farmer).

Julie Livingston's book, *Improvising Medicine* focuses on the social experience of cancer in Botswana by describing a cancer ward at Princess Marina Hospital. She

argues that public health care ignores the epidemic of cancer that is affecting this region, and that cancer care is lacking vital resources needed to expand healing and aid in palliative care. Livingston explains the historical background for cancer care and demonstrates how patients, doctors, nurses, and families are influenced by these societal and historical structures. She is a long-term participant observer on the cancer ward and she shows how the cross-cultural exchanges and language barriers between the German oncologist, the local nurses, and the patients complicate the patient's experience.

Cultural exchanges must be negotiated in a variety of hospital and healing settings as Cheryl Mattingly demonstrates in her book, *The Paradox of Hope*, which portrays on the experience of African American families in a Los Angeles hospital. She focuses on children with chronic diseases such as cancer and her event-centered ethnography describes the challenges that parents face when trying to access proper care for their children. Some of the challenges stem from communication differences between biomedicine and African American culture. Mattingly describes the urban hospital as a place where these multicultural differences must be negotiated and navigated to find healing. The children and their families cultivate hope, which is sometimes found in play therapy sessions and positive exchanges between health care providers and patients (Mattingly). At Muhimbili National Hospital, hope is also essential to cultivate against the daunting situation of having childhood cancer in a low-income country. Mattingly's study was especially helpful when I was analyzing cultural exchanges and the efficacy of play therapy.

Frank Sloan and Hellen Gelband depict why cancer control is challenging by using Tanzania as a case example in their book *Cancer Control Opportunities in Low-*

and Middle-Income Countries. Published in 2007, the book describes risk factors, cancer burden, possible prevention measures, palliative care, and advocacy. The section on Tanzania depicts the overall health issues in the country including high incidence of HIV/AIDS, lack of oncology training, deficient regular screening available, and limitations on biomedical palliative care. The report gives specific facts and evidence to help support my comparisons with other low-resource health centers.

Harris, Shao and Sugarman's research on the delivery of cancer diagnosis in Northern Tanzania illustrates how cultural and economic context shapes how a physician gives a diagnosis. Their study focuses on a specific example of cultural differences in communication strategies by illustrating how Tanzanian doctors deliver diagnoses. The "round-about" method of diagnosis is considered more appropriate by Tanzanian doctors and they believe it can help in the patient's understanding of their condition. Mitchell had similar findings in her cross-cultural study on cancer disclosures, describing how in Japan, Eastern and Southern Europe, a direct method of conveying a diagnosis is considered to be insensitive. She argues that culture is important for doctors to understand when diagnosing cancer and other life-threatening diseases (Mitchell).

Charles Good presents his work on East African medical systems, specifically the plural medical system found in Kenya. His book, *Ethnomedical Systems in Africa: Patterns of Traditional Medicine in Rural and Urban Kenya*, describes how an "ethnomedical system" has evolved from people's worldview to include popular, traditional, and biomedical forms of medicine (Good 22). Good offers the story of "J." as an example of how after receiving a terminal prognosis traditional medicine helped

his condition to be temporarily alleviated and for him to eventually find comfort and peace in death (Good 286-289). Yet cancer patients who first consult a traditional medical practitioner before a biomedical doctor find that their disease was not alleviated by the traditional therapy (Good 285). The relationship between biomedicine and traditional healing has also been the subject of research done by Collins Airhihenbuwa, Claire Wendland, and Stacey Langwick on the cultural aspects of medical systems in Africa (Airhihenbuwa, Langwick, Wendland).

Often with childhood cancers, biomedicine can provide healing that can cure or prolong the lives' of children. Scalan and Kaijage establish how biomedicine can expand healing in their article published in the *British Journal of Haematology*. First published in 2012, the article describes a history of childhood cancer in Tanzania, and how since 2004 survival percentages have greatly increased through chemotherapy and other supportive care drugs. There are also developments in nursing and nutritional support for children (Scalan & Kaijage 706). The review titled, "From Denis Burkett to Dar es Salaam. What happened next in East Africa? – Tanzania's story" represents one of the only in-depth analyses of childhood cancer in sub-Saharan Africa.

Additional research must be done on cancer in sub-Saharan African countries as the degree of cancer rise in these areas because of increasing life expectancies, rapid urbanization, and the global trend towards unhealthy lifestyles (Chan). Due to HIV/AIDS, malaria, and tuberculosis along with non-communicable diseases like cancer there is a double burden of disease facing most of Africa's health ministries. With further research on cancer and other non-communicable diseases there can be an increase in support, awareness, and funding to help increase survivorship and lengthen

lifespan for people who suffer from these diseases. Many organizations such as the World Health Organization and other non-profits are advocating for immediate action to help (Chan). Further anthropological research can inform public health workers how to treat cancer in a culturally appropriate way.

Chapter Two: Communication: Spoken and Visual

Healing interactions are highly dependent on spoken communication between patients, doctors, and family members. The communications I analyze in this chapter include the delivery of a diagnosis, linguistic translations, cultural translations, and how children are taught to express themselves around their pain and emotions. There is also a discussion of play therapy and its role in facilitating communication by utilizing visual image to communicate. With individual actors from a variety of different backgrounds, cross-cultural communication is essential for healing to occur for the patients.

Giving a Diagnosis

Giving a diagnosis and prognosis is not a culturally neutral practice, but one that is defined by the culture of the doctor and the patient. The method of giving a diagnosis and prognosis must be considered when healing in cross-cultural settings such as that of Muhimbili National Hospital. In Tanzania, the method of giving a diagnosis differs from a Western approach because most Tanzanian doctors prefer to go around the issue to be sensitive to their patient's expectations. One doctor explains:

Expatriate doctors are very direct. Maybe it's not just them. But society would prefer that they go around a bit. The problem is that our patients have a different level of understanding. We should take more time before we get to the explanation of the problem. For our patients, it's not enough to say, 'You have TB, HIV...' They don't even understand immunity. They need more time. (Harris, Shao, and Sugarman 909)

The Tanzanian "round about" method of delivering a diagnosis comes from a cultural mode of extended greetings and indirect discussions of private topics. The Tanzanian physicians appreciate this approach because they believe the patient will have a better

understanding of their specific situation (Harris, Shao, and Sugarman 909). In Harris's study, some of the Tanzanian physicians did withhold a terminal prognosis, and instead gave the family members the information so they could make an appropriate decision (Harris 913). Surveys have shown that while biomedicine defaults to a direct disclosure, many other cultures have different expectations about what is appropriate information to share and delivery of the information (Mitchell 153).

Across cultures, the prognosis of an incurable and life-threatening disease such as cancer is difficult for any medical practitioner to negotiate. Outside of Western biomedicine, there are cultural groups that value the right of the patient to not be burdened with a terminal prognosis and the duty of the family to protect the patient (Mitchell 158). Words and sentiments in Botswana are understood to hold great power and nuance, so they must be carefully given, such as a terminal prognosis that could cause people to "give up" and die earlier than necessary (Livingston 16) The expectations and reactions of the patients must be considered when navigating these complicated prognoses.

I was not close enough with any of the families to study the giving of a diagnosis. Studying the diagnosis of a chronic disease presents ethical and sensitive topics because of the gravity of the situation. The data that Harris et al. presents is therefore significant for international health care providers in Tanzania. At the pediatric ward, there could be further studies done on how these families receive and respond to diagnosis and the role the child has in the diagnosis. The language barriers are also important to consider when exploring these doctor-patient communications, to which I will turn in the next section.

Linguistic and Cultural Translation

Dar es Salaam, with a population of more than 2.5 million people (Kithakye 11), is a cultural borderland made up of different ethnic groups and an international mixture of people (Mattingly *The Paradox* 6). The diversity of the city can be easily seen in the hospital where health professionals from Tanzania work alongside people from many other countries (such as Ireland, America, Great Britain, and Australia). Because the patients come from different ethnic and linguistic groups and the cosmopolitan nature of the hospital, there are significant language and cultural barriers. Volunteers and foreign doctors who could not speak Swahili interact with families and patients who often knew little English. There are some children and families who speak just their local language. For example, one child was dropped off at the ward by herself who did not know any Swahili. The health care providers at the hospital were struggling to discover where she came from and how to communicate with her. Therefore navigation of the cultural borderland found at Muhimbili Hospital is not always simple and problems with language barriers often occur.

The international staff often felt the need to learn Swahili because that was the primary language most of the children spoke to comprehend the patients symptoms more clearly. However, speaking in Swahili in the hospital is difficult because biomedicine as a cultural system has developed a specific vocabulary that must be explained when translated in any setting. Dr. Trish and her staff constantly navigate these translations. Dr. Trish speaks Swahili fluently and some of the other foreign health practitioners could as well. For example, one day I went upstairs to tutor one little boy on math problems, when I met a Swedish nurse.

October 11th

The Swedish nurse came in to check on the little boy I was tutoring and the other child in the bed next to us. She could speak some Swahili, which I found intriguing. We began talking in English together. She explained to me she had only been at the hospital for about a month, but she is trying to pick up Swahili. Then she asked the little boy about how he was feeling. Did he have a fever? Was he sleeping okay? She asked those kinds of questions in Swahili. The little boy responded that he was feeling okay, but having a few problems sleeping. We continued to complete math problems from the math book after she left.

This ability to communicate with the children in Swahili may have helped the children and their families feel more comfortable. However, even when people are ostensibly “speaking” the same language there may remain issues of cultural translation and where concepts do not translate even when words do.

The culture and vocabulary of biomedicine comes from the Western world. Many of the terms have been adopted into Swahili in recent years, such as the word “*kansa*” to signify cancer—which is an obvious import from English. Historically, the word “cancer” in dictionaries and oral histories in Swahili focus on the characteristics of incurable wounds and bad sores or swellings. In an English-Swahili dictionary from 1939, the definition of cancer is *namna ya donda baya sana* which translates to a type of a very bad large sore (Johnson 74). More recently, a 1975 medical dictionary translated cancer as *ugonjwa wa hatari wa mavimbe au vidonda*, literally a dangerous disease of tumors or ulcers (White 17). Dr. Bosire, a linguistics professor and Kenyan, describes cancer in Swahili as *kidonda sugu*, an incurable wound. In his experience the word cancer was first popularized in the 1980s in Kenya (Bosire *Interview*). Today, cancer in East Africa is referred to as “*kansa*” or “*saratani*” which has Arabic origins

(“Saratani”). The vocabulary for biomedicine is unique and a language of its own making translations in practice challenging. Words and concepts are also continually evolving in the local dialect, like the introduction of *kansa* and *saratani*.

Foreign non-medical workers, like volunteers and play therapists, also confront language barriers while communicating in the ward. Some of the children could speak English because they attended an English primary school, but most of the children spoke Swahili. Emma and I studied Swahili in school during the time we interned at the ward; our vocabulary grew, but we never achieved proficiency in speaking spontaneously with the children. I personally felt the constraints of the language barrier when I tried to teach certain concepts. For example, one day I tried to deliver a lesson about biology:

October 30th

When Emma and I arrived at Muhimbili, we walked upstairs to the classroom. Suzanne, the teacher comes up to me, “I need you to help someone up in the ward,” she says. She takes me upstairs and into the isolation room. Inside is a thin teenage boy with sores all over his skin. I asked him how old he is in English and he does not understand. So I ask in Swahili, he responds that he is fifteen. He is supposed to be in Standard One, where all his classes are in English. The teacher hands me an English textbook on biology, and asks me to teach it to him. I stare at the book for a minute dumbfounded on how to translate biology ideas into Swahili. I asked Suzanne if I could get my dictionary. Emma brings the dictionary up a few minutes later, and together we try to explain the characteristics of life in Swahili. We ended up acting out a lot of the characteristics. The boy maintained interest, despite the nonsensical nature of our presentation. He was generally eager to learn more. He took notes from the book in a notebook, and watched us intently.

Emma and I attempted to express biology through limited Swahili and non-verbal communication to this boy. Biology, similar to biomedicine, has a distinct vocabulary set and our Swahili skills did not include this type of language.

Along with linguistic translations, there is a need for cultural translation because the patient’s illness perception derives from their culturally-based idea of their body. In Western culture the mind and body became a dichotomy at the turn of the 17th century as scientists attempted to separate the body to be a domain of science and the mind to be a domain of the church (Scheper-Hughes & Lock 9). Currently, clinicians continue to confront the mind-body dualism in Western biomedicine while trying to explain the psychological connection to the physical body (Scheper-Hughes & Lock 10). In other medical systems this dichotomy is often not as prevalent or does not exist entirely.

Livingston explains that in many parts of Africa the body is perceived in a different way,

with the organs combined in different systems and the relationship between the human and the illness manifesting differently (72). For East Africans traditional healers the dichotomy does not exist between mind and body. These healers try to restore *uzima* meaning wholeness in Swahili and to be in good health does not necessarily involve freedom from disease but more functionality in everyday life. (Graboyes 1). Sickness is therefore defined by how the culture perceives the body and its capacities, making a cultural translation integral to medical work in a cross-cultural environment.

Helping Children Verbally Communicate

Issues in communication also occur because the children are under such psychological and physical distress that they struggle to express their experience. The teachers and play therapist of *Tumaini la Maisha* help the children to communicate their emotions during their illness with activities designed to develop vocabulary and stimulate expression. A study completed in 2012 in Bangalore, India, on play therapy for children with cancer found that play can be a means through which they express distress and can provide a “lifeline” (Chari, Hirisave, and Appaji 303). The anxiety and psychological distress that accompanies cancer treatment can be alleviated in part by play therapy. After successful treatment play therapy can also improve the adjustment to life without cancer (Chari, Hirisave, Appaji 307). The sessions in Tanzania provided similar benefits as shown in the study done in Bangalore. At the Muhimbili Hospital’s pediatric oncology ward, the play therapy sessions and classroom provided the children with a normalized and amusing setting separate from the ward upstairs.

Play therapy helps children with their emotional expression to raise moods. Lily the play therapist at Muhimbili does specific exercises with the children to stimulate

emotional expression. Lily cannot speak Swahili, so she relies on the teachers there to help translate.

Thursday, September 13th

The play therapist, Lily, started with the little kids. One of the teachers sat there with her, and translated. Lily had cards with round faces on them and underneath an emotion written in English: happy, sad, scared, frustrated, excited etc. The teacher translated each of the word as the picture came up. The children were told to repeat the word. Lily then asked the children to pick a word to describe how they felt when certain things happen to them at the ward. They would point at the picture that described their feeling as she flipped through the stack. Some of the questions she asked were like how do you feel when you get a shot? How do you feel when you see a friend? The toddlers and young children understood the basic feelings and they related to her questions through the teachers translations.

In this interaction, Lily is attempting to bridge cultural differences to help the children with their psychological well-being. She using images to express the different emotions and encourages the children to participate so they can better communicate their experiences.

Children's participation in play therapy can lead to healing from the side effects of cancer treatment. In Mattingly's work she follows one child, Belinda, diagnosed with a brain tumor. The therapy sessions are designed to help her balance and fine motor coordination and also restore for her a sense of normalcy through participation in play (Mattingly *The Paradox* 156). The children at Muhimbili may also experience better coordination and other physical improvements through the simple play therapy sessions. The play-therapy sessions and classroom setting also resembles ordinary

child's play, which can give the children hope to survive and return to normal life.

Children can also cultivate hope through shared stories and characters in play.

Imagery in Cross-Cultural Communication

Western children's popular culture, such as Disney, has become globalized. The films and stories create characters that can span a vast array of cultural borders.

Mattingly describes how American clinicians draw on these popular characters to relate to the children. Characters like Buzz Lightyear and Spiderman can be "indigenized" so that it fits the child's own illness experience (Mattingly *The Paradox* 175). She describes how, "families and health professionals draw upon globally popular narratives to develop a shared story of hope and to counter the stigma of disability" (Mattingly *The Paradox* 176). These children's characters can be easy to identify with as their stories often require overcoming adversity and present a hopeful narrative of recovery.

At the children's ward of Muhimbili Hospital murals on the wall depict Tom and Jerry, Winnie the Pooh, and other Disney characters. The images are colorful and happy and stand in contrast to an otherwise bare hospital ward. In my sessions with the children, they seemed to respond positively to these characters. Often in the afternoons they would watch children's films that furthered their understanding of these globalized characters. One day in the ward, SpongeBob Squarepants was of particular assistance. SpongeBob is a yellow sea sponge whose ocean world offers colorful images and funny characters, and he is known for his crazy antics and strange adventures. I pulled out a SpongeBob coloring book on one of my visits to the ward:

Tuesday, September 25th

We took the watermelon up to the ward, visiting all the children and their mamas. Then we grabbed the special toys and supplies to bring around to the children. One little boy was looking more alert, so I went and sat with him. I read him a SpongeBob coloring book in English, so I'm not sure he understood any of it. He seemed to really like the pictures though and the fun images. Afterwards we sat and colored together. There were specific markers we could use with the children in the ward that could be easily sanitized after. He enjoyed coloring SpongeBob with these markers, so we sat together for about thirty minutes transforming the white pages to a colorful images.

SpongeBob seemed to provide amusement for this child despite the language barrier. As Mattingly argues, “Global commodities targeted to children can provide a symbolically rich common ground for adults and children” (Mattingly *The Paradox* 198). The application of these popular characters can provide a commonality when communicating in a multi-cultural setting like Muhimbili Hospital.

Describing cancer in other languages and cultures, as described above can be challenging, but explaining cancer to children also presents its own challenge. Vivid imagery can help for children to better understand their disease. Images of cancer as a bug being eaten by a big chemo bear or cancer as a wave being surfed out are described by children with cancer (Bombeck 24). After interviewing multiple childhood cancer survivors, Erma Bombeck found that a war narrative often simplifies cancer for children. Mom, Dad, and families acted as the foot soldiers, nurses and therapists become the officers' staff, and the generals are the doctors who make the big decisions. The problem with cancer is that no one knows the enemy well, not even the generals (Bombeck 30-31). Battle imagery for cancer may have begun in the Western world but

as a part of biomedicine has been transported across cultures (Mattingly *The Paradox* 66),

I witnessed the globalization of biomedicine and the story of the battle in the classroom when the play therapist showed a Dutch film to explain cancer to children. The film, *Paul and the Dragon*, relies on the battle drama to inspire children to fight their cancer. The setting of the film is a developed Western city with a white male doctor, new cars, and well-stocked hospitals, quite a contrast to the setting at Muhimbili Hospital. Yet, the film does not have any dialogue and utilizes images to describe the battle of cancer. Here is my experience when we watched this film:

Thursday, October 11th

Today we watched a movie about a boy with cancer. The film symbolizes cancer as the metaphor of fighting a dragon and having little magical medicines to help you. The film is just music and drawings so I am sure it is shown all over the world to help children understand cancer better. After the film, the children made monsters out of clay with Lily and fought them, like they fight their cancer. The teachers helped to translate this concept. The children made all different kinds of monsters to fight. Lily explained to them about how they need to be brave when fighting their sickness, like Paul did in the film. I helped to make a couple of the dragons. I think the children really enjoyed watching the film and the hope was that they were inspired to fight like Paul did.

Paul and the Dragon demonstrate the classic battle story in biomedicine. In the battle story, science and technology become the heroes while the patient and families take secondary roles (Mattingly *The Paradox* 66). During this play therapy session, the children were allowed to take their own initiative to create dragons that they could conquer. Art and play can allow children to communicate in a nonverbal manner. By

encouraging children to be creative, they can express their emotions rather than holding them in. Art therapy such as the clay monsters allows the child to reconstruct their experience (Goodman 314). They also shared how this made them feel and what they were most scared of through verbal communication with the teachers.

Both spoken and visual communication helps children to express their illness to family members, volunteers, and health care providers. There are challenges at Muhimbili Hospital because of the multi-cultural nature of the ward. Additionally communicating with children presents unique challenges because they are still discovering how to express themselves and their illness. The complexities of cancer make the sharing of information complicated, but visualizations of the disease can help children perceive the problem they are confronting. Childhood cancer in a cultural borderland demands healing interactions to draw upon a variety of different methods. Communicating pain can often be one of the most challenging of these interactions.

Chapter Three: Pain and Relief

Children with cancer experience pain both due to the cancer mass and the therapeutic procedures meant to treat the cancer. Due to the late stage at which many cancers are diagnosed in Tanzania, the pain many children face is often due to the cancer itself. These children suffer from acute and more chronic forms of pain associated with the cancer, such as headaches from leukemia, brain tumors and lymphomas or injury to the nervous system from tumor or treatment (WHO guidelines 24-25). For children with cancer, amputations can cause phantom limb pain to the point where they may find it hard to believe the limb has been removed (McGrath 10). In this chapter I describe how children express both acute and chronic pain, the efforts to socialize pain, and approaches to palliative care.

Pain Expression

Children modify their pain expression according to the socio-cultural meanings of pain that they observe around them (Bush & Harkins 7). During early development, children watch their family members respond to and deal with pain to create their own attitudes and coping mechanisms (McGrath 32). One developmental psychologist

Matisyohu Weisenberg describes this learning experience as such:

Since pain is a private ambiguous situation, comparison with others helps to determine what reactions are appropriate and how pain is to be communicated. Is it permissible to cry? Does one have to “grin and bear it”? When is it permissible to ask for help? When is appropriate to mask the pain with analgesics? People learn to express their reactions by observing the reactions of others. (Weisenberg 92)

In sum, the child adopts their pain expression and communication from the people around him/her. There are differences in sensations that should be tolerated according to

a culture, and children learn this as they grow older from their social surroundings (Weisenberg 92). In many sub-Saharan African countries it is normal to express physical pain through non-verbal signals. In Livingston's study in Botswana she found that, "people from approximately age five and up are expected to undergo all but the worst pain in silence" (128). The patient may be verbally silent but still expresses physical pain through visual cues. Facial expressions and other "subtle calculations" are made to discover if a patient is in true pain (Livingston 128). The children then watch these normal means of unspoken pain expression as they grow and develop.

The older teens in the cancer ward seemed to understand these culturally appropriate ways to show pain. The fifteen year old boy, whom I tried to teach biology to, felt pain from his cancer as well as the treatment. Two days after our biology lesson, I returned to his bed side:

Thursday November 1st

We arrived at Muhimbili about an hour late. I went upstairs to try to teach the boy more biology. He had a bad fever though, and was feeling sick and tired. I wrote up some vocabulary for him to look at if he felt better later. He was the only one at that time in the isolation room. The boy's body seemed incredibly weak and frail.

The boy appeared to understand that he was not to express the pain by being loud or complaining but instead endure it quietly. His pain was obvious in his outward demeanor, however, which is why I did not push to continue our lesson in biology.

In contrast, a young girl maybe seven or eight years old expressed her pain vocally. While I was counting and doing number exercises with a different little boy, a group of doctors came in the room. They began examining the girl in the bed next to us.

Tuesday October 2nd

The child in the bed beside us started crying loudly, from fear perhaps but also the pain in her body. The doctors had to check her blood pressure. I glanced over and saw her small skinny arm. She was very bony and thin. Her body is worn out from cancer and the treatment. The cries portray the intense pain she felt because of her illness.

There are many factors that could attribute to the girl's reaction to pain. The girl may not yet understand the culturally correct response to pain because of her age. She may also be experiencing more intense pain from the blood pressure cuff. The pain could be of acute nature instead of a chronic sort that she was used to, or prepared for. Yet, her mom encouraged her to keep quiet and tried to comfort her, demonstrating how families teach children the socially appropriate ways to respond to pain.

Socialized Pain

Throughout the cancer ward, there are endeavors to make pain a shared experience, not a cast-away independent phenomenon. The children's pain surely felt isolating and lonely at times, but their pain was acceptable to share and feel in public spaces and a group. In the classroom children find comfort being around people who are busy interacting and learning. In the blue chairs children would simply stare off, tired and most likely in some sort of chronic pain, but they sat there versus going up stairs to their beds. The classroom and the open nature of the ward changed the pain experience so that it was one that everyone could help with, even if the experience itself felt isolating.

Livingston found a similar socialization of pain in Botswana. She describes that, "though pain threatens to isolate an individual in his or her body, ideally (if not always

in practice) every effort is made to socialize it, through active affirmation of its presence, through palliation, through laughter, through bodily contact” (Livingston 149). She demonstrates this through case examples of nurses saying “Botlhoko” which is Setswana for pain (131), hand holding during painful procedures (132), as well as nurses and families constantly striving to understand and relieve pain in the ward (149). At Muhimbili Hospital the teachers in the classroom made efforts to socialize pain as well. For example one day a little girl had an epileptic attack of sorts where she fainted and started shaking on the floor near the front of the room. The teachers immediately came over to help her as she came out of it looking dazed. They sat with her and comforted her until her mother came from downstairs so that she would not feel isolated. In Botswana and in Tanzania there seems to be constant efforts made to comfort patients in pain by using the social nature present in the ward.

The ward itself also depicts a social experience. Each room in the ward seemed to be divided by severity of the disease, and in this way they were also separated by pain level. The first room was full of children experiencing intense pain. We often struggled to do bed therapy in that room because most of the children would be sleeping or being tended to by a doctor. Each of the rooms down the hallway of the ward seemed to lessen in pain level. The children at the end of the ward were normally ready to play and most of them would be in the classroom. For this reason Emma and I often sat and tutored children in the middle rooms in moderate pain.

Inside each room the children and their families would interact and often befriend each other through their personal struggles. They worked together as a healing community. For example if one mother would go to get her child fruit or other food, she

shared with the family in the bed next to her child or if one child was sleeping, the room would be filled with a hush to aid in the child's rest. Some of the toddlers would wander through the ward, which I found surprising at first but I soon realized that all of the parents watched out for the children together. The parents also would respond to children's pain through comforting touch or by using a fan to diminish the heat. The families were constantly looking to comfort and alleviate pain for all of the children at the ward.

Palliative Care

Palliative care is the endeavor to alleviate pain for patients, and is severely lacking in Tanzania. Oral morphine is most commonly used for physical palliative care because its effectiveness today is unquestioned, but in Tanzania there are significantly lower amounts used compared to the United States and other Western countries. In Tanzania interventions that are used in high-income countries, such as use of analgesic drugs, occupational therapy, psychology, and hospice care are limited or non-existent (Sloan & Gelband 227-242). According to Sloan and Gelband's 2007 report, "palliative care is in its infancy in Tanzania, with fewer than 10 percent of those who need palliative care having access"(318). There are drugs for mild pain and treatment like paracetamol available and affordable at hospitals and over the counter in Tanzania, but the next step of pain medication is not available at most hospitals and the medication for intense pain that is available is not recommended for the chronic pain of late-stage cancer. Recently there have been efforts made to develop services by adding some home-based care and delivery through non-governmental organizations but currently the ORCI is the only hospital in the country that dispenses oral morphine (Sloan &

Gelband 318). Because of the lack of vital medications and other therapeutic methods of palliative care, alternative means are currently providing essential relief.

Lily, the play therapists who came to the ward every Wednesday and Thursday, often would use music therapy for palliative care. According to the World Health Organization, palliative care includes care for the body, mind, spirit, and support for the family (*Cancer Pain* 8). A study done by Hendon and Bohon from California State University suggests that music therapy may actually be more engaging for hospitalized children than play therapy. They conclude that providing music therapy leads to better mental and physical well-being for children (Hendon and Bohon). When Lily played music the children were very engaged and excited to participate.

Thursday, September 20th

Lily came in around 10:30 to do a music therapy activity. She had all the children lay down on the mats and they were each given a piece of paper to color on. Lily played some calm instrumental music while they drew or listened. Afterwards we talked about how the music made them feel as well as their pain and emotions. She asked the children, "What hurts the most?" One child described getting a bone marrow aspiration as what hurt the most. Lily also asked "what do you miss from home?" Most children missed their brothers and sisters. One little girl described her home near Moshi, in the north of Tanzania. She wanted to go home to see her family there. All the children expressed the desire to go home.

After the music therapy they seemed more eager to share their experiences with the rest of the class.

In the classroom visiting therapists led sessions aimed at providing psychological and emotional relief, which may alleviate some physical symptoms. One

day while I was in the classroom there was a large group of volunteers from Aga Khan Hospital, a private hospital in Dar es Salaam. I observed the following:

Thursday, November 29th

The play therapists and specialist from Aga Khan taught the children a “gonga” (tapping) song today. There is a white doll with blond hair that has distinct marks on her that represents the spot the children are suppose to tap on during the song. The children were then supposed to draw on a teddy bear picture of where they tap. It seems like they all like the song very well, but they were confused in the drawing part. I helped some of the children to figure out where they should place their spots. The song starts on the forehead and moves down the body. I would assume you are tapping on some energetic pressure point of some sort. The specialist from Aga Khan appears to be from somewhere in Europe or maybe Australia, I am not entirely sure. The teachers help to translate for her to the children on what she is explaining. Lily seemed very excited about the new technique.

This technique is called Emotional Freedom Technique developed by Gary Craig in the 1990s as an energy psychology therapy (McCaslin 249). The scientific evidence behind these therapies is controversial, but there are some testaments proving positive results. There are theories of cognitive and behavioral psychology that could explain some of the successes of these techniques (McCaslin 250). The use of this technique does testify to the creative approach to palliative care that health care providers explore when other more effective approaches (such as pain medications) are not available.

Traditional medicines are an alternative that patients may seek out when palliative care in the biomedical realm is not available or offered. Traditional healers can also give more spiritual and emotional support for cancer patients. In *Health and Culture* Airhihenbuwa comments, “as long as Africans successfully seek treatment from both allopathic and traditional healers, it is prudent to strive for mutual

collaboration based on respect and trust between the two types of health providers” (60). An example of this occurs in East Africa when *kansa* treatment by traditional medical practitioners can provide a sort of hospice for the terminally ill. Herbal remedies can bring patient’s physical comfort as well. For instance, herbal medicine can help to alleviate coughing, digestion problems, and basic pain relief (Good 286-7). Through better collaboration between biomedicine and traditional healing methods there can be more effective palliative care.

The classroom as a play space separate from the pain in the cancer ward is essential to the children’s psychosocial well-being by giving them a place to ‘escape’ their cancer treatment. The World Health Organization in their palliative care guide states, “play is an essential part of every child’s daily life and even the sickest child can be helped to play. Playing enables children to understand their world and to relax and forget their worries” (*Cancer Pain* 20). Play therefore becomes an integral part of palliative care in any pediatric ward. For children who were physically unable to go to the classroom space, play was still essential to their palliative care. Dr. Trish understood this, and specifically asked Emma and me to continue to play with the children who were unable to go down to the classroom. She spoke with some of the nurses so that they could help facilitate the bedside play program. Play therapy as palliative care demonstrates the broad nature of pain alleviation and how it goes beyond just relieving physical pain. Palliative care’s goal is to relieve pain for the entire individual, body, mind, and soul.

Volunteer Day

Thursday, November 8th

Today at Muhimbili there were many other volunteers: Two young girls from Iceland, two wives from Australia, and one psychologist from Agha Khan Hospital. The classroom seemed full of unknown faces, with a majority of people who did not speak Swahili. I felt a little overwhelmed by the number of international volunteers there.

I was the only volunteer who knew a little Swahili, so Lily the play therapist asked if I could come upstairs to help with the bed visits. She said that Dr. Trish wanted us to do this to engage with the children. Lily asked if I could help develop some type of bedside play program, but the program cannot be very strict because each child's needs are so different. I could definitely help decipher what the children want to do usually and different ways to play constructively with them. On the way up to the ward we ran into Dr. Trish, and Lily talked to her about doing these visits. Dr. Trish assured us that the visits were very important to the health of the children. It was the first time I had been able to interact with this doctor whom I had heard so much about.

Some of the other volunteers came upstairs to help hand out fruit. I taught them the basic Swahili statements to say when asking if someone wanted watermelon and when talking to the parents. After we gave out watermelon to everyone Lily and I set up in the first 'upendo' room, these are normally the sickest kids. There were about 8 children in total there with their mommas who we handed out books and toys to. A few of the mommas helped us by pointing out pictures to their child. I sat with one girl and colored with her and did some math problems. She had stick thin arms and a large tumor on her face, but she already looked so much better than the last time I saw her. The children enjoy getting to play even while in their beds. They must get so terribly bored because there are no TVs or games for them like there are in many American hospitals. Lily left around noon for a lunch meeting but I stayed a while longer playing with the children in the ward.

While I sat in the ward it was nice watching Dr. Trish and all her helpers in action. I know little to nothing about medicine but I still enjoyed eavesdropping on their conversations. There were a couple of Tanzanian doctors there she was training, and at one point she kept asking them the same question, obviously frustrated with their lack of knowledge. At other times I have noticed there are always new white doctors coming in, and I've only been here for three months. It must be hard to work without a steady staff. Also I wondered, 'where are all these doctors from? How do they find out about Muhimbili?'

At one o'clock I cleaned up all the toys and books. I left one little boy with some math problems to do while he was sitting in bed. Back in the classroom Hadhi hugged me and jumped all over me before finally letting me leave.

Chapter Four: Support Systems

A child diagnosed with cancer relies on important systems both for emotional and physical support to overcome cancer and return home. This chapter explores the support systems that are available for children with cancer in Tanzania, focusing specifically on in-patients at Muhimbili National Hospital. I begin with parental and familial support, and continue to the support offered by the local community and state. The chapter ends by describing the international support networks that are currently helping to fund cancer programs in Tanzania. These support systems are integral and need to be expanded on to raise survival rates for children diagnosed with this life threatening disease.

Family Role

Families play an integral role in supporting patients in any medical setting. Livingston notes, “Any medical system is built on the premise that patients cannot fully care for themselves” (166), and with children this is even truer. The parent of a child with a chronic disease takes on the role of home co-therapist, chemotherapy shot administrator, navigator of different labs and therapy sessions, as well as emotional supporter (Mattingly *The Paradox* 12). The parent’s identity becomes intertwined with their child and the disease and the parent’s lives change in context with the child’s chronic disease (Mattingly *The Paradox* 31). The parents at Muhimbili hospital in Tanzania exemplify these roles throughout the course of their child’s cancer treatment. The parent helps with play therapy, navigated the hospitals classroom, chemotherapy, and food services. During the classroom time, the parent form an essential connection

between the treatment going on at the ward and the lessons happening in the classroom. For the toddlers, the parent would often sit with their child during the play therapy sessions, so the child could venture to play with volunteers or other children, but if they feel uncomfortable return to their parent. For the older children their parent would stop in periodically to check on their child or bring them to their next appointment.

Thursday September 20th

During the session, a father came down to take Izak back upstairs. Izak is one of our favorite little boys. He speaks English well and is very bright. He had to go upstairs to see the doctor or get chemotherapy for the day. This happened throughout the classroom time, parents would pop in to find their child to take them back upstairs to the ward for treatment. We did not see Izak for the rest of the day.

This example proves how the parents played the navigator between the ward and the classroom. Parents quickly learned the layout of the children's ward so that they could better support the healing of their child.

Parental support is even more evident in the ward itself. When Emma and I went upstairs to serve watermelon or play with the children in their beds, parents were always present. At one end of the ward, an entire room would be filled with fathers and brothers waiting for their children to receive treatment. Often only one guardian would accompany each child who appeared to play the role of mother and father to the best of their ability while living at the hospital. While sitting with the child, a mother may appear with food and fruit from an outside stand. The parents help their children use the bedpan if they need to relieve themselves. My conversations with the parents were normally very brief, but most of the mothers and fathers were open to our help. On

several days, we handed out books and materials to the parents and some of them would help participate with their children.

Tuesday, October 23rd

In the 'upendo' room there was one little boy who looked especially lively today. His mother sat with him, and as I helped him with some math problems she began to chime in. She helped me to explain some of the math concepts that I struggled with.

Thursday, October 25th

I visited the mom again, and because there were not enough volunteers, I sat with another child. I asked if she would like a book again. She responded yes, and helped her son on some of the math problems.

This mother, like many of the parents, supported their child in both non-clinical and clinical activities. Brothers and sisters sometimes took the role of the parents as well. I distinctly remember meeting one older brother bringing food and reading with his younger brother while he was receiving treatment. The children and the hospital staff relied on family to take on many roles in supporting the patient in their treatment.

Local Community Support

The government established the foundations for cancer care for children, allowing for continued development by the state and non-governmental actors. Since 1982, the Tanzanian government included cancer as a free service for any of the citizens (Scalan & Kaijage 705). The Ministry of Health and Social Welfare run the cancer treatment center, primarily through the ORCI. The government recognizes cancer as a serious public health problem, and much has been done to expand cancer services. But because there is only one cancer institute in the country, there are fewer than 10 percent of the estimated 30,000 new cancer patients each year who make it to the ORCI (Sloan

& Gelband 315). In addition to government support for childhood cancer, there have been local non-governmental organizations (NGOs) improving the conditions for pediatric oncology. In 2012-2013, local Rotary Clubs and Bank M, a national bank, rebuilt the children's cancer ward to greatly advance the conditions for children with cancer ("Rotary").

In addition to the structural support, the children need emotional and spiritual support. A study done by Murray et al. compares qualitative interviews from cancer patients in Scotland and Kenya. The Kenyan cancer patients found comfort in their community, whereas many of the Scottish patients struggled to find emotional support and the health care system failed to meet their psychosocial needs. The Kenyan patients lacked the palliative care and physical needs, but found comfort in their spirituality, family, and community (Murray 4). Tanzanian cancer patients face similar challenges and also seek non-clinical support in their families and communities. *Tumaini la Maisha*, by supporting volunteer services like that which brought me into the ward, helps to provide for this psychological and emotional support for the children and their families during and after cancer treatment.

The community non-clinical support for children with cancer began recently with the foundation of *Tumaini la Maisha*. This organization supports children and their families as well as promoting awareness of childhood cancer throughout the country. I believe the most important aspect of *Tumaini la Maisha* is the teachers because they provide independent instruction and often comfort for the children receiving treatment. Phillip was the original teacher employed through the organization, and several others

have joined. The first time I met Phillip was playing with the small children. My experience was as follows:

Tuesday, September 18th

I went out of the hospital with a big basket of toys to go play with the children outside on a mat. The children sat in the shade of a large tree to stay cool from the warm equatorial sun. I sat down on the mat and began to play building blocks with two of the children. Phillip sat across from me and I introduced myself. We spoke briefly in Swahili about my studies and his family. He had been on a vacation or a trip of sorts, so this was the first time I had met him. Phillip is a very humble and quiet man in his demeanor and the children love him. They climbed all over him that day in the sun as he laughed and joked with them.

Phillip cared primarily for the toddlers and younger children; often I would come into the classroom to find him holding a small child and comforting them. His passion for the children demonstrates how an individual can make a great impact on the children's treatment while they are at the hospital.

The other teachers, all local Tanzanians, are integral because of their ability to translate and make the children feel comfortable. The teachers taught math and writing, but I would often see the teachers holding a small child who felt too tired to study. In this way, they provided some relief for children as well through their comforting touch. The teachers served as care providers, and also importantly translators for international workers. Suzanne, the head teacher, communicated with us the most because she spoke English well. Suzanne also translated for the play therapist and other guests. Each of these teachers provided important locally based support that an international volunteer would struggle to provide because of language and cultural barriers.

Outside of the classroom, the nurses also give support both physically and emotionally. In the oncology ward of Princess Marina Hospital in Botswana, the nurses serve as translators, therapists, and friends (Livingston 96-117). Livingston notes the broad duties of nurses in these desperate conditions, writing, “Nursing is understood to require sentimental work. Compassion, care, empathy, even love are expected to animate and orient the work of nursing and this is where its greatest critiques lie” (97). I observed nurses functioning in a similar role at Muhimbili Hospital where they worked tirelessly to help the children and their families. The nurses would take the time to sit on the foot of the bed and have genuine conversations with the children or their guardian. In the chemotherapy room the nurses helped to comfort children while receiving their treatment by being patient and kind. Many of the nurses are local women and men tirelessly giving their time to the children at the cancer ward.

The nurses and teachers provide support within the hospital, but the children and their families rely on religious and spiritual support outside of the hospital as well. In front of the children’s ward there is a mosque and there are often large crowds of women and men gathering for prayer. Along the coast of Tanzania and Kenya there is a large Muslim population and it is clear that many patients and families seek comfort in religion (“Tanzania-Religion”). Murray’s comparative study found that religious beliefs provide comfort and peace for many Kenyan cancer patients. One patient says, “God comforts me; my heart calms down when I remember this and I get emotional support.” Another patient explains his lack of anger toward death as, “We belong to God and he will take us away when he feels it is right, when he wants” (Murray 3). The religious community meets many of the cancer patient’s psychological, social and spiritual needs

during their cancer treatment and palliative care (Murray 4). At Muhimbili Hospital the placement of the mosque right outside the pediatric ward geographically demonstrates how religion serves as a central form of emotional assistance for families at the ward.

International Support

In the last two decades, international non-governmental organizations have improved treatment and care for children with cancer in Tanzania. In 1999, the International Network for Cancer Treatment and Research (INCTR) was established to provide cancer care support and research programs through partnerships in resource-poor countries. INCTR partners with the Tanzanian government to collaboratively treat and care for children with cancer. In 2004, when the pediatric oncology ward officially opened in Dar es Salaam, a Burkitt's Lymphoma (BL) trial began through the INCTR. The BL trial's treatment markedly increased two-year survival percentages from 15% to 73% in the last six years (Scanlan & Kaijage 705). Through INCTR there is support for research on a multinational trial for the treatment and characterizations of African BL as well as overall enhancements to clinical care. INCTR is also been instrumental in raising cancer awareness at international and national levels (Scanlan & Kaijage 706).

Children in Crossfire (CiC), an Irish-based charity, provides essential non-clinical funding and support. The Tanzanian government and CiC established a children's school for patients living at the ward (Scanlan & Kaijage 706). CiC began working in Tanzania in 2008. They have funded *Tumaini la Maisha* the local family support program to run these non-clinical services ("Cancer Care"). Starting in 2011, CiC paid for funding for Lily and nurses salaries (Farrell *Interview*). In 2012, CiC

funded the building of a long stay hostel at Dar es Salaam for the children. While there I was able to tour this hostel facility; this journal entry describes my experience:

Tuesday, August 28

The director gave us a tour of the new facility they are opening for patients to live at while they are receiving treatment. The building is two stories tall, made of mostly concrete blocks with tile floor. There are two classrooms for the children, one designed for the older children and one for the younger. There is also an income generating room for the parents to create handicrafts to sell at local markets while their children are at school. On the second floor there are eleven bedrooms, each having two patients and their parent in it on two single beds. There are communal bathrooms and shower areas at the end of each hallway.

The facility also opens up beds in the ward for other patients who are in critical need of treatment, not only long-stay treatment. In 2013 CiC along with Dr. Trish began a Masters program for pediatric oncology and a nursing certification program (“Achievements”). INCTR and Children in Crossfire have worked with the Tanzanian government to produce the rapid progress for the treatment and survival of cancer in the last five years (Scalan & Kaijage 706).

Tumaini la Maisha receives support from Irish Aid and foreign society groups. The support from Irish Aid began once *Tumaini la Maisha* was created as a local non-governmental organization registered in Tanzania (Farrell *Interview*). Irish Aid involvement began in Tanzania in 1975, and their overall goal is to reduce poverty and vulnerability (*Tanzania Country Strategy*). In addition to this bilateral support, the evidence of the amount of foreign affairs and diplomacy going on in Dar es Salaam can be seen in ex-patriot groups. Spouse groups of international ambassadors, the Irish Society, and the Caledonian Society donate clothing, toys, and school supplies to the

ward and hostel (Farrell *Interview*). One morning I spent organizing all of the donated toys and clothing in the new hostel. There was a great array of different clothes and shoes for the children to wear while they are receiving treatment, thanks to the donations from these foreign groups.

International volunteers also come to the hospital from all around the world to engage in service as well as a cultural exchange. Many of these volunteers learn about the program through United Planet, an organization that places volunteers in sites and helps to arrange food and lodging as well (“Tanzania Volunteer Quests”). Emma and I also served a similar position as volunteers, but we learned about the program from a past study abroad participant.

Tuesday, November 13th

Today at Muhimbili we met volunteers from Iceland, New Zealand, and Germany. The teachers asked Emma and me to bring the new volunteers up to the ward and show them how we play with the children in their beds. First we taught them a little bit of basic Swahili so they could better communicate with the kids. We explained to the new volunteers how to hand the watermelon to all of the children so they could do this when we were at the University. We sent the volunteers to help with other children, and they seemed to do well.

The volunteers from other English speaking countries like New Zealand appeared more comfortable in the classroom and in the ward. Some volunteers from Germany and other European countries who did not speak English proficiently struggled when communicating with the teachers and children. Most of the volunteers, including Emma and myself, were females in our late teens and early twenties. The international volunteers encounter language and cultural barriers but bring with them energy and new ideas to help invigorate the classroom and bed therapy program.

An expansion of local actors in the hospital would promote efficiency in communication. The international nurses, doctors, and non-clinical volunteers provide immediate help but do not create a sustainable environment. More local staff and volunteers would allow for better communication, and ultimately more long term support for the children. On the walls of the classroom were paintings and pictures from a University volunteer group that visited the children, evidence of growing local support. More local funding could also prove to be more sustainable. As Dr. Emmanuel Kandusi, the director of the Tanzanian Prostate Cancer Fund argues, “we must drink from our own wells” (Kandusi *Interview*) meaning local organizations, businesses, and the government must help to support the fight against cancer in Tanzania. Thus far the children in the pediatric ward have been helped through international funding which must continue to treat children until local capacity is built up.

Chapter Five: The Bright Side

The first emotion of childhood cancer in Tanzania is most certainly one of sadness. A child faced with an incurable disease anywhere in the world is tragic. Happening to live in one of the poorest countries in the world, these children with cancer are in a particularly desperate situation. They face a struggle to survive that no child should ever have to face. Yet despite the sad facts, I believe there is a bright side. Within these windows of observation on childhood cancer, there are stories of human resilience, dogged determination for better treatments, laughter in the face of extreme pain, and a hope that each child will survive one more day, and possibly even be cured.

Scientists and doctors around the world continue to strive for better treatments to improve each child's possibility for survival. Doctors who are with the children every day truly put their heart and soul into their work. I would see this with Dr Trish as she transcends the cultural borderland of the hospital ward. Her practice demands both linguistic and cultural translation from the biomedical culture she was trained in. Dr Trish could easily have returned to Ireland, to a temperature-controlled and well-stocked ward, but instead she fights on. She does so with both local and international support that has already made significant advancements in care for children.

These advancements demonstrate the very dynamic changes occurring in Tanzania. One of the most influential changes is the rebuilding of the pediatric oncology ward since I left in December 2012. As well as more visiting doctors and volunteers passing in and out from a range of different countries, each leaving their own distinct mark on the children's experience. In addition, the hostel facility has undoubtedly changed the classroom and the amount of people getting treatment.

Therefore my writing offers just a brief snapshot in a progressing and evolving community of healing. That community of healing includes the teachers, play therapists, doctors, nurses, volunteers, families and most importantly each child. The hugs and laughter the children shared with us reveals the large capacity they hold to love and to persevere with happiness throughout their treatment. The children shine brightly as beacons of hope but their supporters around them are their foundation and guides for a better tomorrow

The evidence I present demonstrates how individuals make a difference for the children when other areas fall short such as spoken communication or palliative care. When spoken communication fails in cross-cultural interactions, teachers, volunteers and therapists utilize acting and visual images to interact, teach and translate for the children. The teachers, doctors and nurses also navigate situations when palliative care lacks by providing more comfort and emotional support. From the teacher holding a sleepy child, to the parents always standing nearby, each of these adults acts with incredible patience and compassion. The individual actor passionately gives their time and energy to create a community of support for the children.

Tanzanian culture offers avenues of hope for cancer patients as well. The ability for a community to help ease the burden of a chronic disease has proven to be very strong in areas around East Africa. Patients claim to feel spiritual and social support before, during and after treatment from their community--this emotional assistance enhances their psychological health. The local culture also can provide patients with physical relief. Traditional medical practitioners provide herbs and supplements for important palliative care that often biomedicine in developing countries fails to provide.

Further collaboration between biomedical treatment and traditional culture could greatly strengthen the treatment for children with cancer.

An illness experience is also environmentally defined meaning the specific people and conditions the patient lives in during the course of their illness. For children at Muhimbili Hospital the multicultural nature of the ward affects their experience. They learn about their illness from international doctors and local Tanzanian nurses. Children discover how to communicate their pain from their families, and their emotions from an Irish therapist. The funding for their treatment then comes from the national government and international charities and research funds. The cosmopolitan environment impacts the child in many ways from how they get treatment to how they communicate. The children's experience is therefore complex and culturally diverse.

I have described this experience through themes of communication, pain and relief, and support systems. These three themes are not meant to stand alone, however. Each topic connects with the other in a myriad of ways and pain, communication, and support are intertwined. For instance the international support includes volunteers who try to help children's psychological pain with play therapy but they struggle to communicate because of translation difficulties. To explain these connections further, I will describe the role of the play therapists as an example. Lily is from Ireland—demonstrating how international actors are a part of the support system for children. She helps to ease emotional and psychological pain by doing specific exercises with the children. Lily also brings in toys for the children to play with so they can take a break to have fun. Throughout all of her sessions she helps the children to communicate. The teachers translate for her so the children can comprehend how to express their emotions,

their pain, their relationships and their illness. Communication, pain and relief, along with international support are illustrated in her role and work.

There are also many areas outside of these three themes that did not fall within the scope of my research. I did not interview or have direct conversations with the children about their emotions and perceptions of cancer, which with the right methods and approval could be completed in future studies. In addition the illness experience does not end with the walls of the hospital for these children such as: how the children each came to the hospital impacts their treatment and probability of survival; where the children go if they are out-patients determines how they receive palliative care; the stigmas these children face because of having a chronic disease occurs outside the hospital; the lives the children lead after they leave the hospital is also integral to their illness experience. All of these topics and issues fall out of the scope of my ethnographic observations but should be included in future studies.

Research on childhood cancer in sub-Saharan Africa is extremely limited. As the cancer epidemic grows across Africa both scientific and anthropological research must follow. Cancer is present throughout the world but the types, the number of cases, and the culture surrounding it vary. The historical perspective on cancer in many of these settings is also often unknown. While the Western world has cataloged the evolution of cancer and its treatment from their perspective, there is limited knowledge on how African societies treated and approached childhood cancer. Continued studies could give health care practitioners a more culturally appropriate approach to cancer treatment.

From a public health perspective, the future must hold that pediatric oncology units in Tanzania are spread throughout regional hospitals. Currently there is no

oncology training program in Tanzania (Sloan & Gelbund 318). A doctor training program needs to be established to train Tanzanians with areas to focus on such as pediatric oncology. Increased efforts from local NGOs and the government can allow for treatment to be self-sustaining so problems in translation are not as prevalent. As survival rates in the Western world expand medical technology can help save the lives of children around the globe. I hope, and I also have a strong faith that through the dedication of these people, all of these actions can occur.

There is a substantial amount of growth to be done, but there is also plenty of hope and optimism. Hope is what I hold on to as Hadhi and Molly smile up at me while I hug them goodbye. Because without hope in the face of a life-threatening illness what do you have? The children help us to see that, as they play and learn throughout their sickness. They give me hope, and I suggest that they are what give the doctors, nurses, parents and family members hope also. With each effort made, one more beautiful unique life can be saved. The children truly embody *Tumaini la Maisha*, Hope for Life.

“Kwa Heri”

Tuesday December 11th

We loaded up the bajaj (a small taxi) with our electric oscillating fans to donate to the children at the hospital. First we brought the fans up stairs to the third floor of the ward. We explained to the nurses that we would like the children in the isolation rooms to have these fans. The isolation room would get very warm because the door constantly had to stay closed so there was little to no breeze to cool off the room. The nurses took the fans in their office for the moment, but seemed to understand why we brought them.

Next, Emma and I went down to the classroom on the second floor. The day before, we bought about thirty little hand woven bracelets to give to all the children. Because there were so many children in the classroom that day, we almost ran out of bracelets. I had one on my wrist and gave that away. In exchange the children had made us good bye and Christmas cards. Molly drew her hand on the front of the card and wrote, “Dear

Tara & Emma kwa heri bye bye by Molly God Bless you. Go east go west but home is best karibu tena. Welcome again!" Another child's card included Christmas drawings and other sketches. He wrote, "Merry Christmas Kwa Heri Karibu Tena!" (Good Bye Welcome Again). I liked how they included both Swahili and English.

Before we left we asked all of the children to come together so we could take a big group picture. Then, Emma and I said our goodbyes to the teachers, who asked us to come back again soon. Hadhi, Molly, and Rahma, three girls who we had befriended, all gave us a hug good bye. I will surely miss their smiling faces and laughter that overcomes any obstacle they may face. The children will continue to inspire me throughout my life.

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