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AN EXPLORATION OF SOUTH AFRICA'S PUBLIC HEALTH LANDSCAPE: UNDERSTANDING THE CHILDHOOD MALNUTRITION EPIDEMIC AND INTERVENTION BY THE PHILANI CHILD HEALTH & NUTRITION PROJECT VIA DIRECT OBSERVATION

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I would like to gratefully acknowledge the professors that have nurtured and supported me towards completion of this true labor of love - my thesis project. From inception to pen-on-paper, this exposé sums up my difficult, yet eye opening experience in some of South Africa's poorest townships.

Using the knowledge developed over several years at California State University Los Angeles, in both nutritional science and food service, in conjunction with my acceptance into New York University's International MPH Summer Immersion Program, I was able to make comprehensive reflections regarding the public health issues confronting South Africa. Having studied several disciplines of dietetics, my experience at the Philani Child Health & Nutrition Project, the NGO I partnered with, allowed me to better understand the pressing problems behind malnutrition in this African country.

I would also like to thank the many professors that have helped me craft my writing voice, both at CSULA and at my alma mater, USC. A very special thank you goes out to my reviewers, Professor Kathryn Hillstrom, Ed.D., RD and my advisor, Professor Pera Jambazian, Dr.P.H., RD for their continued patience while executing this project. Always eager to give feedback and put forth new ideas, their respective input has aided not only myself, but of hundreds of students before me. Both have been essential guides throughout my journey to becoming a community and public health centered Registered Dietitian, and I cannot thank them enough.

Lastly, in honor of my priceless experience with Philani last summer, while crafting this thesis project, I decided to fundraise on their behalf this summer. I am

delighted to share just over $1,200 was raised for this organization, which continues to impress and astound me in their most worthy endeavor.

ABSTRACT

AN EXPLORATION OF SOUTH AFRICA'S PUBLIC HEALTH LANDSCAPE: UNDERSTANDING THE CHILDHOOD MALNUTRITION EPIDEMIC AND INTERVENTION BY THE PHILANI CHILD HEALTH & NUTRITION PROJECT VIA DIRECT OBSERVATION

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Malnutrition is a chronic problem facing the children of South Africa's townships. This epidemic thrives within the country due to many conjoining factors, and accordingly, understanding one component requires understanding them all. Having the opportunity to experience the undertakings of one particular South African NGO first hand, Philani Child Health & Nutrition Project, this paper details the current modes of intervention and the strengths and weaknesses therein.

The project is composed of six sections as follows. [Chapter 1] provides a brief introduction on the state of nutrition in the townships, also known as informal settlements. The meaning of malnutrition according to the World Health Organization is discussed, as well as the purpose of the project as a whole. [Chapter 2] reveals statistics regarding the scope of South Africa's current malnutrition landscape along with a review of established literature, which continues to serve as a baseline for future studies. Insight is provided on why this type of malnutrition exists and why it is proliferating in Africa's most well-resourced country. The Philani Child Health & Nutrition Project is introduced at this point. Their role, mode of intervention, and implementation is described and examined, leading to potential areas for improvement. [Chapter 3] outlines the project's

methods - from inception to completion. The mode of observation and information sharing is disclosed. [Chapter 4] includes discussion and personal reflection of the author's immersion into the most prominent and pressing public health matters facing South Africa. This provides the reader with a deeper understanding of the author's perspective, post-experience, on the current state of affairs and their intricate relationships.

The last two sections, the appendices, include the following: [Appendix A] is the memoir of the author's experience identifying the crossover variables and linkages between disease and rates of malnutrition proliferation. It was originally thought to include solely the memoir written on Philani; however, because the problem of malnutrition is incredibly intertwined with South Africa's other public health issues, truly understanding malnutrition requires an understanding of the larger picture. [Appendix B] is a compilation of pictures, in the form of a photo journal, from the author's time as an observer at Philani. Pictures do speak a thousand words and providing a glimpse of the living conditions and fragility of life in these environments serve to enhance the concepts presented.

The objective of this project is to better understand malnutrition and its related public health issues, ultimately in an effort to spark innovation towards improved management of nutrition and infectious disease in South Africa.

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CHAPTER 1

Introduction

Childhood malnutrition in South Africa

Proper nutrition throughout the lifecycle is necessary to maintain optimal health but is especially crucial in the initial years of life (Suskind, 2009). Unfortunately, many children in developing countries suffer from high rates of poverty and food insecurity. South Africa, despite its status as the wealthiest country in Africa, is not immune to the crisis of malnutrition, and its government has proven insufficient at comprehensively handling the problem (Conley & Du Plessis, 2007). Because proper nutrition in a child's early years heavily dictates the consequential pattern of growth and development (Kirby & Danner, 2009), nongovernmental organizations (NGOs) have been formed to protect the country's impoverished communities and find creative solutions to confront malnutrition.

Definitions

Malnutrition can be defined as "a lack of some or all nutritional elements necessary for human health" (NIH, 2011). Two types of malnutrition exist within the human body. The first is called protein-energy malnutrition, PEM, in which both protein and overall caloric intake are insufficient to support adequate growth and development (Black, Allen, Bhutta, Caulfield, de Onis & Rivera, 2008; Grover & Ee, 2009). This type of patient will typically present with marasmus, a condition characterized by severe tissue wasting resulting in a skeletal-like frame and is often found in communities plagued with prolonged starvation (Caballero, Cousins, Ross, Shike & Shils, 2005). The second type of malnutrition consists of micronutrient deficiency, specifically vitamin A, iron, zinc, and

iodine, usually caused by a diet containing sufficient calories but insufficient amounts of key vitamins and minerals (World Hunger, 2011; WHO, 2009). This form of malnutrition may result in kwashiorkor, in which general tissue wasting is usually accompanied by edema and a distended abdomen (Caballero et al., 2005). This is the most prevalent type of malnutrition found in South Africa (Heikens & Manary, 2009).

Purpose

Because of the complexity of malnutrition in South Africa, this project serves to expose not only the severity and reality of childhood malnutrition, but to bring together the other interrelated health determinates in an effort to demonstrate the complex structure of South Africa's poor public health status. That being said, and with roots both deep and intertwined, trying to pinpoint one cause or reason behind malnutrition is impossible. The concept of malnutrition in itself seems easy to understand and tackle; however, when malnutrition finds its home in communities with high rates of infectious disease, the combination becomes fatal (Caulfield, de Onis, Blössner & Black, 2004). Understanding the larger picture allows malnutrition to not only be better understood but perhaps allow for better management.

CHAPTER 2

Intervention & Supporting Literature

Effects of Malnutrition

In South Africa, the dominant factor contributing to malnutrition is poverty. This results in a general lack of resources, including inadequate education, food insecurity, inaccessibility to health care services, and lack of transportation (Government, 2004). Poor infant feeding practices and low birth weights, which are found in about 15% of South African newborns, decrease a child's likelihood of adequate growth and a healthy immune system, leaving them susceptible to various opportunistic infections (Black et al., 2008). Malnutrition is often caused not only by insufficient or inappropriate food intake, but may also result from a number of illnesses, such as HIV, gastroenteritis and/or tuberculosis, compromising the body's immune system, often leading to inefficient absorption of nutrients (Heikens, 2009). If malnutrition due to compromised food intake and/or an underlying infection goes unresolved, a cycle emerges where one or both factors keep the child in a chronic state of illness and debilitated growth (Black et al., 2008).

In 2010, the United Nations Statistics Division reported that malnutrition affects about 5% of South Africans from all age groups (Index Mundi, 2010). According to the Western Cape Government (2004), this figure masks the disproportionate burden on children, with an estimated 30% of children suffering from some form of compromised growth, such as stunting, which is low height for age, due to inadequate nutrition. A 2005 National Food Consumption Survey found 10.3% of South African children aged 1 through 9 to be underweight, 21.6% to be suffering from stunted growth (over 25% for

cases aged 5 or under) and 3.7% to be suffering from tissue wasting (Labadarios, McHiza, Steyn, Gericke, Maunder, Davids & Parker, 2011). In 2010, the prevalence of underweight children aged five and under was around 12%, making it highly unlikely that South Africa reaches their 2015 Millennium Development Goal of 4.7% for this age group (The World Bank, 2011). It should be noted that rural areas suffer from a higher prevalence of general undernutrition than urban areas (Bourne, Hendricks, Marais & Eley, 2007).

The effects of malnutrition on a child and his/her family are substantial. The most immediate concern is death of the child, particularly children under the age of five who have underdeveloped immune systems and longer recovery times. The current figure for mortality rates of the undernourished in this age group stands at 7% (le Roux, Comulada, Greco, Desmond, Mbewu, Nokwanele & Rotheram-Borus, 2010). Simply put, 7 out of every 100 South African children will die each year with an underlying cause of malnutrition.

Long term effects can be exponentially devastating. Chronic malnutrition in the first two to three years of a child's lifespan causes irreversible damage, which accentuates the importance of intervention in these first few years of life (Caulfield et al., 2004). If intervention is not carried out for such a child, neurocognitive brain development is compromised, resulting in a possibly lower IQ, behavioral impairment, and insufficient adult height, thus reducing the child's "physical capacity for work" (Education Trust, 2012). A malnourished child is less likely to attend and excel in school, and their potential contribution to economic productivity is greatly reduced. They may also suffer from weaker immune systems, susceptibility to chronic disease, and an overall

diminished quality of life (Heikens et al., 2007; le Roux et al., 2010).

Consequently, conquering malnutrition is critical to South Africa's long-term economic success and enhancement of its image abroad. Over $1.1 billion in GDP is lost to vitamin and mineral deficiencies, while basic nutrition interventions to combat this are estimated to cost only $55 million per year. Additionally, chronic childhood illness is associated with a loss in the family's adult wages, perpetuating the cycle of poverty (The World Bank, 2011).

Poverty is a cause of malnutrition and malnutrition is a cause of poverty; as long as one exists, so too will the other (Bourne et al., 2007). At the heart of the problem lies a lack of knowledge and lack of resources. To combat malnutrition, access to health education for an at-risk population is pivotal, especially for the pregnant women and mothers of a particular community, who are typically the guardians of a family's health and welfare. When combined with access to essential health care services and income generating opportunities, a basic foundation is built for eradicating the cycle of destitution and its detrimental bedfellow, malnutrition (Vorster, 2010).

Case Study

Philani Child Health & Nutrition Project

Although much literature has been written surrounding malnutrition, its numerous parts and corresponding figures as cited above, little has been assessed in the name of specific intervention success rates for a growing target population. The most prolific study to date regarding the success of specific interventions within a specified community surrounding the issue of malnutrition was administered within the confines of the Philani Child Health & Nutrition Project (Philani). Understanding the role nutrition plays in the

poverty levels and health of children, Philani focuses its efforts on combating malnourishment for the child and expectant mother by addressing root causes within Cape Town's surrounding township populations. Although Philani provides basic supplements and food items, such as Nutrimeal - similar to vitamin enriched porridge, to their clients, their philosophy is one of fostering independence, not dependency on food handouts. Empowerment of the individual by enabling self-sufficiency through education is the essence of their mission. Through self-sufficiency, these women stand a better chance of alleviating their poverty status, which benefits the community at large (Jobs, 2011).

In the aforementioned Philani study by le Roux et al. entitled, *Home visits by neighborhood Mentor Mothers provide timely recovery from childhood malnutrition in South Africa: results from a randomized control trial*, rehabilitation rates, defined as when a child reaches a healthy weight for age, were evaluated against a control group. The study's main focus was to examine if their intervention of home based education via trained Mentor Mothers was able to "rehabilitate malnourished children in a timely manner" (le Roux et al., 2010, p.1). The methodology behind this study, based on home visits by trained mothers within their own community, was to compare a control group that only had one initial encounter to obtain anthropometrics against the intervention group who had visits at three, six, nine, and twelve month intervals. The goal of these visits was to provide nutrition education on topics such as breastfeeding, introduction of solid foods, diarrhea prevention and food contamination (le Roux et al., 2010).

The results of the study were clear in indicating the success of continuous, home based nutrition education for these poverty stricken communities. The results revealed

that with their intervention design, 43% of the subjects were rehabilitated as compared to 31% within the control group, who were only visited once. In other words, the Philani program, utilizing a very direct approach with their community Mentor Mothers, was able to reduce "…the amount of time that malnourished children remained underweight compared to malnourished children in the standard care condition" (le Roux et al, 2010, p.6). This reduced time frame of being in a state of malnutrition is an important concept, as poor long term health is reflective of poor childhood nutrition (le Roux et al., 2010).

The limitations of this study include failing to address the increasing number of children needing these intervention services. Because the Philani model most literally requires person to person interaction, the man power of the intervention staff must be large in number - large enough to be able to reach all their subjects at all required intervals. The feasibility of maintaining such a model lies solely in their ability to successfully recruit, train and retain the Mentor Mothers, also called community outreach workers. How can their current intervention design sustain during this period of malnutrition growth? Having had the opportunity to witness the process myself, I was able to identify several areas where change implementation could effectively meet the growing demand for Philani's intervention program, as discussed later in the chapter.

Observational Analysis

Inception

Philani's unique model provides crucial assistance where government services are severely lacking (Jobs, 2011). Philani was established in 1979, evolving from a single mobile clinic to several permanent clinics with an emphasis on home-based care. Over the years, the organization has responded to community needs and the burgeoning

township population (Philani, 2008). This approach, combined with the programing discussed below, serves to confront these root causes of malnutrition.

Services

Because proper nutrition alone is not enough to establish lasting health patterns, Philani's efforts have grown beyond tackling acute childhood malnutrition. They now include efforts to address the immediate causes of this epidemic: significant lack of resources, high unemployment, rapid spread of infectious disease and poor living conditions (Bourne et al., 2007). They accomplish this through several distinct areas of programming:

- Nutrition Rehabilitation
    - Onsite at five centers in three townships for mild to severely malnourished children including medical evaluation, progress charting, and education/support for mothers
    - Home-based care via 120 community-based workers who monitor 4,500 children
- Income Generation
    - Women referred from the rehabilitation program
    - Foster economic independence through creation of crafts for sale to the public
- Educare Centers
    - Offered to children whose mothers participate in the income generation program
    - Provide a low-fee educational environment for children aged 3-6

    - Encourage mothers to use their Child Support Grant in a beneficial way
- Mother-to-Be
    - Antenatal intervention for preventing vertical transmission of HIV
    - Enhance pregnant mother's nutritional status and expected child's birth weight
- Breast Feeding Clinic
    - Breastfeeding counselors available at seven clinics in Khayelitsha to explain HIV transmission issues and the benefits of 6-month exclusive breastfeeding
- Orphans & Vulnerable Children (OVC)
    - Support OVC to prevent transfer to orphanages, create support plans, assist in school enrollment to obtain government grants
- Dental Clinic
    - Free oral health care to women and children of Philani's program (Jobs, 2011)

Operations

The current operational flow starts with a single outreach worker, who identifies potential cases of malnourishment or vulnerable children within their specified areas. These paid outreach workers are recruited from the various communities within the townships to serve as the eyes and ears of Philani. These women are selected based on their past ability to raise healthy children in a poverty-stricken environment. Philani trains these community workers extensively on topics ranging from negotiating home entry, to conducting interviews, to providing HIV education. Philani uses the WHO child

growth standards to determine if a child is malnourished. If the child's weight-for-height measurements fall below the 15th percentile of the growth standards, then the organization considers this child to be malnourished (WHO, 2009).

When vulnerable, moderate or severely malnourished children are pinpointed by the outreach workers, they receive a follow-up home visit from a nurse. In cases of malnutrition, the client may be referred to the onsite doctor or dietitian who may then refer them to the hospital in cases of highest severity. This two fold system allows Philani to provide customized services based on level of need and to also reach children whose caretakers would not otherwise seek assistance (Jobs, 2011).

Funding

Philani is supported by a staff of 45 people divided into the clinical, administrative, outreach and finance/development departments. Funding is derived through a combination of grants and private donations, giving Philani an operating budget of R13 million per year (approximately 1.5 million USD). Major funders include the Church of Sweden, The World Childhood Foundation, Elma Foundation, World in Harmony, The Western Cape Department of Health, and The City of Cape Town (Philani, 2008).

Assessment

Strengths

Philani's accomplishments can be measured by its continued organizational growth and expansion, as well as its countless success stories. In 2008, Philani's nutritional outreach program provided aid to over 4,000 children across ten informal settlements. The staff also conducted over 91,000 follow-up visits, yielding a

rehabilitation rate of 50% of children reaching a normal weight for their age within eight months of intervention (Jobs, 2011). This figure is significant considering that in 2005, one out of five South African children were affected by stunting, and nearly one out of ten children were clinically underweight (Development, 2008). Philani's Mother-to-Be program enrolled 1,802 clients in 2008, and of the babies delivered that year, only 5.8% had low birth weights - a notable improvement compared to published rates of low birth weights among 11% of newborns across those communities (Philani, 2008).

Philani's achievements in the field are directly attributed to several strengths of the organization – namely, how it approaches its mission of securing proper nutrition in vulnerable populations. Philani's guiding mentality of dispensing nutritional education as a resource rather than issuing food as a "hand-out" reduces dependence by empowering clients, ensuring that the organization's efforts are sustainable. In a similar fashion, teaching caregivers about proper child nutrition, i.e. via breastfeeding tutorials, ensures continuous knowledge that can be passed to both offspring and neighbors. The nature of this philosophy enables Philani to operate with clients on a relatively short-term basis of several months to a few years, which has allowed the organization to filter through such a large volume of clients since its inception. If Philani continues to function in this capacity, they should be capable of enrolling and aiding new clients each year at comparable rates to their 2008 figures. (Philani, 2008; Jobs, 2011)

Another factor that allows Philani to reach numerous clients across several township borders is their utilization of outreach workers. By contracting an outreach worker from within each participating informal settlement, Philani's staff gains access to clients living in areas that are inaccessible to non-residents. In terms of combating child

malnutrition, the inhabitants of these urban informal settlements represent some of South Africa's most dire populations. Rates of child stunting and underweight children actually rose from 1999-2005 in these urban townships, while they simultaneously decreased in the rural ones (Philani, 2008).

One of Philani's strengths is therefore the ability to identify populations of need, but more significantly, to overcome the physical boundaries in accessing these populations without draining their resources. Rather than training the nutrition workers to navigate the townships alone, pairing them with outreach workers represents a strategic allocation of infrastructure funds. The outreach worker model in itself provides strength as well, as this system allows for liaising between Philani and the partnering townships, streamlining the delivery of services, as outreach workers can quickly locate each home among the vast maze of shacks and debris. This benefit is most evident on days when a particular outreach worker is unavailable, and valuable time is wasted while the project coordinator struggles to navigate through unfamiliar territory. Another benefit of incorporating outreach workers into their organization model is that these individuals receive a stipend, allowing Philani to also provide valuable employment opportunities within these communities.

An additional asset of Philani is its effort to extend the scope of its programming beyond nutrition to address factors that contribute to poverty, such as unemployment and lack of education. Identifying poverty as a threat to accessing proper nutrition, Philani aims to promote employment and education among the families it assists in order to create an environment where good nutrition is both achievable and sustainable. In doing so, Philani fulfills its objective of correcting the problem of childhood malnutrition on a

case-by-case basis, while simultaneously preventing future cases from emerging by deterring some of the socioeconomic factors within these targeted communities. This cycle supports Philani's future success in reducing rates of childhood malnutrition in the regions in which they serve.

Recognizing the need to reach populations in poorly accessible areas, Philani's current goal is to expand its services into the remote, rural area of the Tambo district in the Eastern Cape. Initiated in 2010, the *Mentor Mothers Zithulele* serves as a pilot project for delivering Philani's services in a vastly different environment from that of the informal, urban settlements of the Cape Flats (le Roux, 2010). Despite new challenges, Philani recognizes that childhood malnutrition is a nationwide problem, but with steady and well-planned growth, Philani has the potential to reach vulnerable populations in both urban *and* rural areas of the country.

Weaknesses

Although Philani's broad scope of services and organic organizational structure deliver promising results in the field, its effectiveness is limited by technological shortcomings. Philani operates on a paper-based system whereby client data is recorded by hand and stored in filing cabinets. Not only does this system pose a limitation to the amount of data that can be obtained and stored, it bears an administrative burden in maintaining client files and retrieving information. Philani's success can be measured by the amount of people who receive its services, yet as this number increases, the organization must find a way to cope with the pressure of manually managing collected data. Time is wasted each day locating the necessary files for each home visit. An electronic record system would speed up the retrieval process, free up physical storage

space and protect the security of the data. That being said, Philani currently does not have the financial capacity to upgrade to an electronic based system, nor would it be financially wise, at this point in time, to begin saving money for one. Switching to an electronic system would also require training for staff, which could temporarily impede services or evoke tension from those that are unable to embrace technology.

Aside from client data, another area of weakness within Philani is communication and coordination among staff members, resulting in wasted time. In order for Philani's field operations to run smoothly, the outreach workers must work in cohesion with the Philani staff. Proper communication is essential to their field operations in establishing a meeting time and location, as the two parties often meet up with each other onsite within the squatter camps. Communication failures, such as a social worker in the field without cell phone airtime and/or no pre-determined meet up location or an outreach worker neglecting to show up in the township to meet a Philani staff member, were observed. As a result of this wasted time, not every family on the schedule was able to be visited. This problem can be easily amended by implementing a more centralized system - perhaps through hiring an administrative professional who coordinates the field work and home visit schedule and keeps people accountable for their time. Until Philani can manage their external communication, the organization will not function at maximum capacity.

Hiring an administrative professional to streamline efforts and eliminate wasted time places a financial demand on the organization in terms of hiring and training new staff. To date, Philani makes efficient use of its funds and wisely allocates its spending on infrastructure and programming. However, the organization *would* have room to hire an administrative professional if it took advantage of fundraising opportunities. Aside

from maintaining an attractive and informative website, Philani may benefit from publicizing their projects outside of their headquarters in Khayelitsha, South Africa's largest informal township, potentially bringing forth new funders. While Philani profits from 25% of the sales of the crafts made in their skills training program, these goods are neither widely marketed nor accessible to consumers. Philani's website displays only a fraction of the goods for sale in the store, yet the only other place to purchase the goods is at their physical headquarters in Khayelitsha - an area lacking tourist traffic, to say the least. It would be in Philani's interest to form partnerships with shops in Cape Town that sell similar products while concurrently raising awareness of its program to attract donors.

Another weakness Philani possesses is a lack of trained and licensed professionals. They would benefit from hiring additional medical staff, enabling them access to a greater number of clients while preventing employee burnout. Having only two doctors on the team places tremendous pressure on those individuals and jeopardizes client health when they are overbooked. As the organization continues to expand, Philani must hire additional medical staff and begin to financially plan for such growth.

In addition to keeping up with a growing population of at-risk children, Philani must make certain changes to its programming to keep up with a modernizing community. For example, this is specifically relevant to the skills training program that currently teaches only weaving, silk-screening, beading and fresco painting. While these crafts appeal to consumers such as tourists and satisfy the older generation of women in the townships, the younger mothers are showing less of an interest in learning these skills, which they consider old-fashioned and irrelevant. Philani must revamp its

employment project program in order to re-captivate the increasingly younger generation of mothers. Failure to update such programming threatens the future of their expansion.

CHAPTER 3

Methodology

The proposed project was derived from the following comprehensive statement summing up Philani's main objective: "Understanding the role nutrition plays in the poverty levels and health of children, Philani focuses its efforts on combating malnourishment for both the child and expectant mother by addressing root causes within South Africa's township populations" (Philani, 2008). The project itself was executed in three phases over a two month time frame, not including this paper. The foundational phase of first assessing the scope of the malnutrition problem at large was critical prior to conducting phase two. Phase two, in the form of two journals, one composed of written experience & reflection and the other of photography, allows the reader to obtain a clear picture of the multiple consequences of poverty. In the final phase, post physical documentation of the Philani operation, the project links together the various components surrounding the malnutrition epidemic.

The written journaling process, comprised of insight into the various public health issues plaguing South Africa, was continual throughout my time overseas. This armed the project in not only providing a background for observation, but in connecting all the health variables highlighted throughout the journal. For the photo journal, direct observation was captured in pictures and gathered into one succinct book. The method behind taking these pictures was quite rudimentary; we were told not to take pictures, let alone carry cameras. The first day, I entered the township as I was told, in plain clothing with absolutely nothing on me. But after that day, I could not imagine leaving without capturing the vivid imagery found within the interiors. Hence, for the days following, I

wore cargo pants with pockets just big enough for my 3.5 by 2 inch Sony Cyber-shot. Although I was not able to capture the inside view of the shacks we visited, I was able to obtain some general photos of my surroundings to help illustrate the conditions of these informal settlements. However, when the children caught site of the camera, they all wanted to pose. This photography book, together with the written memoir of the experience at large, paints an intense picture of why malnutrition, which in itself seems straightforward to resolve, has manifested into such a complicated problem within South Africa.

More specifically, the methodology behind capturing my time with Philani (refer to Appendix A, Week Three) was designed in a manner to make the most of limited access within the township borders. Accordingly, I had equipped myself with the prior knowledge of Philani's basic operational structure. It was not until I was physically onsite that I noted the labor intensive process of reaching their targeted populations. After completing my pre-research of Philani, I was able to identify an approach that would allow me to absorb the most information within a restricted time frame.

Serving as a principal investigator for Philani's examination, I shadowed the hand to mouth process for three days, each day with a different field worker team. On the fourth day, internal structure of the organization in its support of the field workers was evaluated. Having a chance to observe the inner workings of Philani headquarters, the mechanics of the "behind the scenes" support for their grassroots field work process was critically examined. The fifth day was utilized to uncover any additional problems within the program and to gather current client statistics via interviews with the program staff at various levels. I designed my observations to evaluate the following questions:

- How does Philani's current operational flow begin?
    - More specifically, how are potential cases of malnourishment or vulnerable children within their specified areas identified?
- How are the Philani's community outreach workers recruited, and what qualifications must they possess?
- What topics are the community workers trained in?
    - Negotiating home entry? Conducting interviews? Providing HIV education?
- What growth standards are used to determine if a child is malnourished?
- What happens when vulnerable, moderate or severely malnourished children are pinpointed by the outreach workers?
- How are cases of malnutrition handled?
    - Referral to the onsite doctor or dietitian? A nearby clinic?
- Is this process successful in:
    - Providing customized services to clients based on level of need?
    - Reaching children whose caretakers would not otherwise seek assistance?
- How many staff does Philani employ and what is their internal organizational structure?
- What is the operating budget of Philani and who/what is their funding source?
    - Grants? Private donations?
- Do any technological shortcomings exist that could easily be solved within the scope of Philani's current resources?

After final collection and collaboration with Philani key staff to fill in any gaps of information, I was able to write a summary of my findings (refer to Assessment, Chapter Two). It was at this point, the project was able to distinguish itself from classic design, as it allowed for recommendations that were actually feasible for this organization as it currently stands. When conducting evaluations in a third world country, it is important to provide realistic improvements based on available resources instead of stately ideas that do little to better position the organization. In other words, this component of the project was designed not only to address Philani's weaknesses, but to brainstorm realistic solutions to combat these limitations.

Having already collected baseline information on Philani's numbers, it is of significance to note that I approached this project based on pre-existing statistics of their successes. With that being said, this project was not designed to collect current numbers, but rather to pinpoint weaknesses within the current system that hinder Philani in reaching more clients. As the need for their services dramatically grows, it was ultimately my goal to generate ideas that could be changed within the framework of their existing model in an effort to enhance and expand outreach efforts.

The main difficulty behind executing this type of study was the safety and feasibility of entering the townships. This was the key variable in being able to successfully produce this project, as having an outsider evaluate the process allows for less bias and less familiarity based oversight of the current system. Because Philani functions via direct person to person interaction, observing their grassroots operational process was vital in identifying gaps within their operational model. Consequently, the project was able to pinpoint underlying weaknesses, affording creation of solutions to

improve the organization's effectiveness. If I, as the principle investigator, was unable to work directly with the field workers and their respective clients, this project would not have attained completion. Fortunately, in spite of the difficulties presented in this hands-on approach, I was able to secure my inclusion into the townships per my sponsor's (NYU) treaty with Philani. Based on successful execution, I was able to fulfill the project's objectives to better comprehend the South African malnutrition epidemic.

CHAPTER 4

Discussion

Having a chance to explore "the bush" of Kruger National Park after the educational portion of my journey, where wild animals roam freely, one cannot help but be both amazed and baffled by South Africa. The geography, culture and history are so incredibly rich and diverse that it is hard to comprehend how an area such as the African bush can coexist with another area such as the Cape Flats. I came to South Africa with an open mind and a certain naiveté regarding the country's history, and I leave with a broad, yet multifaceted perspective and a mind full of curiosities and questions.

The issue of public health in South Africa carries a heavy weight – the multiple layers surrounding health care must be broken into individual pieces to fully understand the nature of the dilemma. I must admit, there were numerous occasions a feeling of hopelessness overtook my state of mind. As each lecture unfolded and their respective issues got broken down to expose new ones, one could not help but question how life actually proceeds, or moves forward, within such a framework. But then you get a chance to meet the outreach workers, medical professionals, and community activists that have dedicated their livelihood to bring aid to these impoverished communities. It is then you begin to see how one person can empower another.

Besides the value of visiting clinics and health NGO's throughout the Eastern and Western Cape, meeting the individual people behind each effort has been the most powerful part. I remember speaking with the community outreach worker during a break in a training session at Philani, who started out just like the women she was currently training. Hearing her speak on raising a healthy child with limited resources, or listening

to a taxi driver's opinion on why the HIV epidemic is so prevalent, provided insight into the perception of the individuals that comprise this diverse population.

I also found the distinctions between the urban and rural informal settlements to be quite fascinating. Having started with the urban townships and home visits with Philani, then transitioning to the rural townships of KwaZulu-Natal, one can clearly see both the acute differences and similarities in each type of geography. Although human density is present in both within each home, the rural shacks are significantly more spread out. This begs the question: what effect might this have on violence and disease? It was there, in a rural village, I met a young boy, perhaps seven years old and HIV positive, show me his slew of antiretroviral (ARV) medications. As he and his mother displayed the bottles in their four shivering hands, I was taken by an unknown emotion.

After seeing much worse during this journey, I tried to understand what exactly upset me so much. At this point, I had witnessed babies infected with TB and HIV, victims of brutal violence, and a quality of life that was not suitable for any living thing - yet the imagery of this smiling young boy and his mother, both holding all of his pills, was of great disturbance. I think the combination of the child's reality, combined with the burden of his un-chosen disease, in contrast to his playful attitude, struck a strange cord within my being. I became acutely aware of the disadvantages his future presented him with. Of course, he may find his way out of township life and find success in love, life and a career, but as we huddled over a hot plate in the middle of their two room shack, the overwhelming burden of lifelong ARV treatment and his current innocence towards his reality left me unnervingly distressed.

Looking back, I am not sure who I was upset with (the mother? the unknown father? society at large?), begging the question, can someone serve as the pinpoint of blame? Or is the current disparity of the nation a product of past woes, conquests and politics? It is these questions that continue to flood my mind as I reflect on my journey examining the health and nutrition quandaries facing South Africa.

Conclusion

Stephens Ntsoakae Phatlane's *Poverty and HIV/AIDS in Apartheid South Africa*, paints a clear picture of Apartheid and how it left the local communities of South Africa without the resources needed to overcome poverty (Phatlane, 2003). Without stable access to education, training and basic resources, child health will continue to deteriorate. Philani's nutrition project bridges this gap using a comprehensive approach to support the mothers and children of these impoverished communities. It leverages its programming off of public government clinics and lends itself as an additional support mechanism to the existing framework of the South African health care system. Their success in reaching out to the underserved stems from their grassroots philosophy and close connection with the communities they service. In this manner, Philani works to change the mentality of "dependency" to one of self-improvement and self-sufficiency.

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APPENDICES

APPENDIX A

Written Memoir

Observations of the current public health landscape of South Africa

Week One

Having arrived late in the afternoon the day prior, today was my first "real" day in South Africa. We began with a tour of one of the largest (and growing) townships in the area - Khayelitsha. It was an eye opening experience to say the least. My perceptions of these townships are like that of the ghettos in Peru I had the opportunity to witness the summer before. The main differences between the two were that this township was more dense – there seemed to be no space in between the shacks which stretched for acres. Peru was a bit less concentrated and more spread out. Although we didn't have a chance to walk inside of these particular housing units, I was taken back in simply viewing from afar. But the question that kept surfacing in my mind was 'what do all these people do all day?' With such a concentrated population and what seems like no real economy for jobs, I keep finding myself divert back to the same question. I also wonder if the lack of occupation leads to violence. In the states, we keep kids off the street by providing after school programming. So what happens here? Is this not something that is addressed? I would assume the sheer number of inhabitants and lack of job prospects creates significant problems within the township.

We also went to one of Khayalitsha's medical centers and a battered women's shelter. The medical clinic provided a small glimpse of what patient care might be like. Although we didn't get a chance to walk through it, you could see the lines in the pharmacy and imagine how slow medical attention must be administered. I also felt like

it was more of an urgent care center; it didn't seem like people went there unless they were really sick. I would love to see an example of the medical recording system. Is it computerized? I wonder how care is coordinated between the patients.

After that, we went to the NGO referenced above started by a woman and run by a group of people dedicated to protecting women and children from domestic violence. It was here I saw something that brought nausea to my stomach and sadness to my heart. There was an adorable little girl, about 5, clutching a chair as if she could barely walk. The director told us she had been raped around the age of one several times and is consequently unable to walk. She was so sweet and excited to see us. She kind of attached herself to Jane (our TA) and would not let go. As I looked at her, I felt helpless against her future permanent physical and mental disability. It made me sick and upset. I wondered what her perpetrators were thinking and if they felt ashamed. I feel like it just left me with so many questions and unknowns. The raping of babies is new to me – but I guess it is not uncommon here as I'm learning. Domestic abuse of course exists around the world, but the prevalence of it here in South Africa makes me wonder what additional factors have led to this cycle of violence. Domestic abuse is strange concept to me. I guess I always felt like if I was that person, I would fight back or simply leave the situation behind. Here, amidst the townships of South Africa, that is not exactly an easy option. Gender roles stick in a way I am unfamiliar with. I'm not really sure how to absorb such high levels of domestic violence. It leaves me with questions about the victimized women on the other end and what options they have, if any, in such situations. Like any society, money and power play key roles in crime and violence, but why does it manifest in one way versus another? The child aspect of this is another issue to be

dissected in itself. I wonder how this NGO keeps up with the number of clients needing their services.

After this heavy afternoon, we all got together for our official orientation. I felt like this was a great start to the series of lectures will proceed. I also liked that we finally had a chance to all be together and participate in an ice breaker. The diverse backgrounds and interests of my fellow program participants really adds to the richness of the experience. I also value that everyone has unique travel experiences, and I'm sure past travel stories will be flowing.

Today was one day closer to city center, or "city bowl," as they call it. This excited me since I had not yet seen any real urban parts of Cape Town. We took a minibus to Woodstock, which is where the Old Biscuit Mill is located. Before I get into the Mill, I have to touch upon my first minibus experience. I guess I felt like a sheep being herded into the back of the truck. The system makes sense and gets people from point A to point B in a cheap way. It is basically like the bus system in any city, but unregulated and not as organized or efficient. It is definitely a must do though to truly get a feel for what their "public transportation" is like. After we got off the bus, I felt like I had been dropped off in an urbanized, gritty part of town – but a few yards later, we arrived at the Mill. I was immediately in the company of well dressed, seemingly wealthy white people. It was as if I had been transported back to a Sunday Farmer's Market in Copenhagen, Denmark, where I spent half a year in undergrad. I hadn't yet seen the wealthy white culture of Cape Town yet, so I was a bit taken back. Where did these people come from? Where did they live? Were they all native South Africans? Again, questions swirled in my mind. Of course I loved every minute of this foodie fair.

One of my favorite parts of travel is perusing open markets such as this. That night we went to a group dinner at a Malay restaurant called Bo Kaap, located in the area it's named after. I was impressed with the quantity of food; I guess I always associated Africa with having less food availability. Perhaps that's an ignorant conclusion, but indeed, there was no shortage of food (and it was delicious).

On this Sunday, most of us decided to climb Table Mountain and Di (our South African counterpart to our Program Director) was kind enough to set us up with a guide (one of her daughter's friends). I guess this really isn't a mountain to explore on your own as not only have people died on it, but apparently muggings are a common occurrence. We actually have very similar hikes in the mountains separating the Valley from the basin of Los Angeles that I often hike up. I bring this up because the thought of being mugged while hiking has never even crossed my mind. Anyway, I'm glad we went with a guide because I couldn't really understand the layout of the mountain. We ended at Constantia Neck and it was beautiful. That night, we decided to throw together a potluck dinner, which turned out excellent. We ate and drank in our All Africa House courtyard and got to know each other a little better. I love hearing about everyone's own personal history and how they got to where they are now. I think group dynamics are an important part of the experience and deserve some attention.

Week Two

Today I finally got to see City Center. We were dropped off there to start our walking tour, which was mostly of the Muslim area of town called Bo Kaap. It is here you see the colorful houses often pictured in tourist magazines. During this tour, our

guide also touched upon the Dutch and Boer history behind Cape Town and the Dutch influence of the city, which is made very apparent in not only the architecture of some of the buildings, but of the street names. I didn't really have a good grasp of how Cape Town was formed, so it was a nice start before exploring the current vibe of the city center. We also talked a bit about the day Apartheid ended and the days up to and following this day. The walking tour gave me a better understanding of segregation.

Coming from the liberal state of California, where multi culturalism abounds, I haven't really been exposed to much segregation in my time, but here in South Africa, you can really feel it all around you. There is definitely still a divide; although not physical like it once was, I can still sense the split between whites, blacks and colored in every place I've been thus far. We ended the day at the Greenmarket, a typical tourist driven outdoor souvenir market. These seem to all blend together after a while. From Peru to Israel to China and everywhere in between, these markets seem to be replicas of each other (minus the products sold). The attitude of the merchants and their pushiness feels identical. I'm actually amazed at the similarities witnesses among these types of tourist markets. I wonder if there is some sort of social science behind it all – a global franchise if you will.

Today was our first real day of lecture. We had a guest speaker from UCT give an overview of contemporary politics in South Africa. I came to the country with some knowledge regarding the current political climate of SA, but it's a noteworthy experience to be able to listen to someone who grew up through the change, through Apartheid and see it through to its final days. My immediate reaction post lecture was my curiosity on why I hadn't learned more about this in school. I did not take world history or politics as

an undergraduate, so to touch on every country's respective rise and demise would be an unattainable goal. However, why did I not learn more about Apartheid and how it came to an end in high school? Is this not something everyone should have knowledge about? Growing up in a Jewish family, I know plenty about the Holocaust, but it's also engrained in us within the public school system (at least where I went), but Apartheid seemed to be skipped over. I felt grateful to be able to participate in such a lecture and hear how SA politics have developed post-Apartheid. He addressed 3 major questions:

- Why did Apartheid end?
- What did the funeral look like?
- What happened after the burial?

The take away point I gathered from his lecture addressing these three questions was as follows: Apartheid assumed that it could cram 80% of a population into a 13% land mass while undergoing modernization, essentially deurbanizing a majority. As an outsider looking in, this seems ludicrous and almost crazy in nature, but in fact, this concept was enacted and acted upon, dislocating thousands of people out of their homes and land and forcing them into unlivable, disease conducive environments. This overview gave me a broad understanding of the political climate post-Apartheid and clarified some of terms and important groups that came into play throughout historical SA.

Our next topic, "Transformation in Reproductive Health Policy and Services and an overview of Reproductive Health Issues" presented by Di, provided me with a good framework into which to help me organize my thoughts. I didn't know much about the private sector versus the public health sector within the SA Health System. Does the US health system framework have any similarity to that of SA's? The first level of care, or

the district health system that makes up 90% of all care, was something I found to be quite interesting. How can a region so overwhelmed with infectious disease possibly gain health security if 90% of all care solely stems from a level one facility? It's not until you get to level 3 or 4 (which comprises 2%) that specialists get involved. The system seems backwards and is obviously due to a combination of issues – lack of resources, disorganized management and an ever increasing population. Again I come back to the same question: where do you start when you have problems that exist with such magnitude?

The Sonke Gender Justice guest speaker lecture was today – and it was wonderful. The man speaking was a native Capetonian, born and raised in the middle-upper class academic arena. He spoke of his experience growing up with a father who was the "man of the house," essentially controlling the household. He explained how this kind of familial structure leads to gender roles of how a man should be within society. He spoke of his experiences in South African's time of transition, his involvement in demonstrations and some of the violence that he experienced. As one of the oldest employees of Sonke, he explained how the NGO has developed over the course of time. I was amazed at how much they had done to promote nonviolence within certain communities. We watched an incredibly informative video of a male focus group in one of the townships regarding HIV. The aim was to empower the men to be men that respect women – through nonviolence and HIV awareness. It was a wonderful video and gave me a lot of insight into how a man thinks in certain situations and why this notion of men being physically dominant has perpetuated throughout time.

Our speaker brought a fellow colleague with him who was from Burundi. He told us about his experience growing up in the bush, fighting for survival, witnessing his dad beat his mom and eventually kill her, and his experiences in the Burundi military and the violent acts he committed. He spoke to us in a gentle, easeful way – not like someone that would rape and pillage other people. It was only after much self-exploration he realized he did not have to be violent even though it had been engrained in him from birth. Hearing is story really made me understand why and how this perception of men needing to be violent perpetuates through generations. This organization also does PR and outreach to both men and women in regards to safe sex and to being a part of a movement to help stop the spread of HIV.

Out of the three lectures today (Overview of HIV/AIDS Epidemic in South Africa, Foreign Migrant Youth in SA: Are they a threat to public health? and Contemporary SA Politics and Culture), the topic of foreign migrant youth in SA was the most new to me. After learning about all the health issues of the country and the various channels that feed into these problems, I wasn't sure if it was possible for any other problem to take root in such a setting. I was quickly proven wrong though, as I learned about the migrant youth that come from other parts of the continent to SA looking for work and a better life. Although SA is indeed more resourced, they are still under resourced when it comes to things like health care and jobs for the poverty stricken. This makes for an interesting dynamic between the poor of SA and that of nearby countries. It also creates the perfect storm for the spread of infectious disease via a continuation of poverty, lack of health care services and the nature of the work found (i.e. sex worker, transactional sex).

Although totally different in nature, the US faces a similar situation with migrants, namely Mexican migrants, which come to the US looking for a better quality of life. Being a resident of Los Angeles, California with a huge Latino population, you can easily see how the migrants have become a part of the fabric of life here. They take the jobs we wouldn't take – gardening, labor, etc. while in SA, jobs are so limited in general that it creates strife between the various nationalities and puts an even heavier burden on an already overburdened system. It's interesting to see how various migrant populations have made their footprint in other nations and how their respective governments have handled this influx, namely in the US and SA, and to see the after effects of such migration.

Today we had a change of scenery as lecture was held at the UCT medical school campus. The day was filled with heavy topics and proceeding discussion. A spokesperson for TAC (Treatment Action Campaign) came to speak to us about the mission and goals of the organization. I was impressed with the outreach of their "HIV Positive" t-shirts to generate awareness about the infectious disease. I am fascinated by the fact that HIV is so "hush hush" within the communities of highly infected populations even though it's so prevalent. I can't fully wrap my head around why SA is so HIV infected compared to other regions. In my simple explanation, I think poverty (lack of jobs i.e. things for people to do all day) leads to idle time. Idle time leads to violence (sexual and physical) and a highly sexual, multi partnered population. It seems to have simple origins in my head, but I know it is much more complicated and the layers surrounding each problem are huge issues within themselves.

We also watched a film on voluntary medical male circumcision. This is a topic I did not know much about. It seems evident to me that male circumcision would be an easy thing to implement to babies upon delivery, but it seems like this measure is being put in to effect much later in the male's life, which can lead to a slew of problems (infection being the main concern). A good point was brought up however in that would male circumcision give men the "free pass" to not use a condom? Would it serve as a false sense of protection? This is a hard issue for me to tackle in my head as I'm quick to say that all babies should be circumcised at birth, but I know there are cultural complexities that come into play here that I need to learn more about.

We ended the day with a video depicting the xenophobic violence in South Africa. It was quite disturbing to watch many of the scenes portrayed in the film. Much of the violence discussed was that of the Somalians being terrorized by the South Africans. After the video, I became acutely aware of how little I knew about the current state of affairs of South Africa. I was upset that I didn't know the extent to which this kind of intercity warfare was going on. Besides the obvious disturbing imagery and confusion of the source of all this hate, I took a moment to question our education system. I'm not sure if I meant America's in particular or the education system worldwide. To what extent are current global issues being made aware in the classroom? Why is this persisting? I can only assume its attribution to a lack of knowledge that these things are actually taking place. The more I learn, the more I learn how much I do not know.

To go back to the content of the video – I noticed that many of the young participants of xenophobia in the video simply participated because everyone else was

doing it. This is a powerful concept and exposes the core of how things like genocide take root and grow within a society. I'm grateful to have had the opportunity to watch this video and learn even more about the problems that persist within the townships. I know being a resident of California that we also have immigrant issues with Mexico (namely they take "American" jobs, work under the table and don't pay taxes/buy into the system). I presume South Africans face similar complaints, which is exacerbated by already low employment rates.

This tied in quite nicely with Dr. Guttmacher's previous lecture on migrants and their effect on SA's health care system. How do you successfully integrate migrants into your population when the current population is already under resourced both in health care and jobs? It's a poor against poor war and hearing more about it has opened my eyes to my own country's struggle with these issues. I think the main difference between American migrants and South African migrants is the point that was brought up in discussion – that most of the jobs that the Mexicans take are jobs that American's would not (whether because of the nature of the job or the low pay). We've built a mutually beneficial labor force out of many of our migrants, while in South Africa, there are few jobs to begin with, so any migrant looking for work becomes direct competition. The health care issues and spread of disease that follows these new migrant communities living without good health brings further complexities to the issue of migrants in South Africa.

We took a weekend trip to the Winelands, specifically Stellenbosch and Franschoek. It was filled with white South Africans. Again, I am fascinated by my perception that they seem out of place. I am trying to better understand the relationship

between the blacks, colored and whites of SA. I wonder if all the white South Africans will leave the area eventually. It seems to me that once they do leave, they rarely come back (more of a question than a statement). From an outsider's perspective, their presence in this country seems awkward at first glance.

Week Three

The lecture on malaria this morning was much more fascinating than I had anticipated. I didn't know much about the concentration effect of malaria in certain parts of South Africa as compared to the rest of Africa. It frustrated me that this is a fairly easy disease to manage, and yet it still has high rates of infection in some areas. Again, poverty goes hand in hand with infection rates. This 'phenomenon' is not such a mystery and malaria will often coincide with other problems within the person. It all goes back to the lack of health care in township areas. With one clinic servicing miles and miles of townships, how is anyone expected to get somewhat timely care? Additionally, the more rural areas are quite spread apart. Not only is a clinic not in reach to such communities, but what doctor would want to work in these remote areas? These are realistic dilemmas – a lack of health care in poverty stricken areas.

Just like the lack of regulation, lack of food and lack of proper sewage facilities, health clinics/hospitals can also be added to that list. I think the same goes with TB, which we also discussed today. It doesn't surprise me that a child comes home from the clinic with the right medications and terminates the disease. Then a few weeks later, contracts it again. The living conditions are literally a breeding ground for infectious disease. Nothing is sanitized or cleaned - and rightly so. Living in shack on the dirt

ground probably makes clean clothes a low priority on the list. It's just a self-perpetuating cycle of infection, because although some of these diseases may be easy to treat, if access is available, it is likely the individual will be re-infected again by virtue of township conditions.

Additionally, today gave way to a lengthy discussion regarding male sexual health, which was led by our guest speaker, Doctor Kevin Rebe. Being a woman, men's health has never been of great interest to me, and just like the doctor said, it's not a huge priority for most men. I know my dad falls into the category of "I only go to the doctor if my arm is falling off." Men's health and the issues he discussed were fascinating. I liked how he broke down the differences between physical sex, gender and sexual orientation – which all mean different things. His emphasis on broadening our scope of sex and what it means to health and having open discussions about it was new to me.

At the end of his lecture/our discussion, I concluded that in order to make change within men's perception of preventative care – we have to meet them half way. This means providing more outlets for men to feel comfortable in going to a doctor. As our speaker said, it's unlikely a man will go to his town clinic as he probably knows the nurses/staff there. There is no level of confidentiality in some of these systems. It also means that if someone is HIV+ and will not abstain from sex, society must work with them to find ways of having the best protected sex possible. It's about working with what you have and dealing with one person at a time. I think that's a valuable perspective. Often times I find I want to take care of 100 problems at once, and that it's either all or nothing, but in the case of infectious disease in SA, where you have so little

control of what people do when they leave a clinic, finding happy mediums that are easier to follow a small, yet meaningful impact.

This week was spent shadowing my selected nutrition related NGO, the Philani Child Health & Nutrition Project. This served to be an invaluable experience because it was the first time we were able to see the interaction between an NGO and the surrounding community from the ground up. This is where the statistics we've been learning about came to life. After my time with Philani, mainly participating in home visits, I was able to understand their efforts and the organic nature of it. The NGO structure that exists within Philani is grassroots in nature. There is a direct service line between the medical staff and the community relayed by their 120 outreach workers.

I think the most valuable aspect of this experience was the shock value of the home visits. From a distance, one can see the townships and its corrugated metal and cardboard construction. The various colors and levels could almost serve as an interesting painting; however, up close and inside, these shacks are poorly constructed, rotting edifices that often house several people. The smell inside these shacks alone serves up some shock, but the beds, almost serving as trash cans, and the dirty interiors make you wonder how infectious disease could ever leave this bacteria playground. The lack of sanitation – from the bowls and cups to the bed and ground, make you wonder how someone could maintain their health within the borders of such living conditions. This type of imagery made me question how one could live a healthy life in the borders of some of these townships. This is where Philani plays a hand in aid- by using the empowerment mentality to give people long term tools to get themselves up and out of the trenches.

Having spent the first couple days doing home visits on moderate to severely malnourished children (often co-infected with HIV and TB), I was feeling hopeless and disheartened (to say the least) and was ready to see what was going on from the operational side. So during our last day at Philani, I was able to shadow and speak with the various department heads within the facility. Watching the new class of outreach workers in training, I couldn't help but wonder how their life unfolded up until this point. The leader for the day explained to me that these women, mostly unmarried with children from a few different men, were able to raise healthy children in spite of their economic hardships and poor living conditions. Obviously this raised several questions for me; given the same conditions and hardships, how is one person able to survive in this urban jungle while another one sinks? Is it an internal factor? Or did they have circumstances within the community that allowed for these differences?

Again, I come back to the individual, regardless of their environmental influences, and the innate personal respect and ambition that comes from within each person to go on and manifest a healthy life for themselves and their kin. I also had a chance to speak with the registered dietitian who is on staff two days a week at Philani. I really enjoyed picking her brain about what it means to be an RD in South Africa, the steps to become licensed, her overall thoughts on nutrition in the townships and her role within the scope of the problem.

After out time shadowing at our respective NGO's, we had a lecture from The Gender Health and Justice Research Unit at UCT on "Sexual Violence in South Africa." A huge concern seemed to be the misinformation floating around the problem. Due to the nature of rape, statistics are off, and the policing system doesn't seem to be helping.

With a two year backlog of cases within the court system, information turnover is slow, which to me is a direct inhibitor of progress. I also think that when there is progress, for example with the Sexual Offences Act that was more gender neutral and had a broader definition of rape, the lack of collaboration between the police and health care workers has undermined the success of the act. There is so much to be examined within the area of sexual violence and its normalization of behavior within certain communities.

Week Four

Week four was spent in KwaZulu-Natal. I wasn't sure what to expect during this part of the trip, but I found it to be an integral part of learning about public health in this transitional country. Although we had many laughable frustrations throughout our time in KZN, namely the electricity going out just about everywhere we went, the experience gave us the opportunity to explore other facets of poverty within SA and the similarities that exist throughout the eastern and western cape.

The most notable aspect of the trip was the township stay. Again, I had a lot of uncertainty regarding this aspect of the week, but I came with an open mind and an appreciation for things I had taken for granted (heat being one of them). It was an unusually cold winter in KZN and we even experienced snow on our way to The Bend after the township experience. Staying in the B+B's of the township, which represented the "better side" of things, I realized that this was a glossy version of a typical night. With a lock on the door, crude plumbing and a study roof over my head, I was uncomfortable. Part of that uncomfort was due to the feeling that this family had welcomed me into their home, yet I felt like such an intruder, and that just my being there

was somehow disrespectful to them, like I was getting a "township experience." What I mean by that is I felt like they might have thought I perceived them as monkeys in a zoo and that I was there to "observe" how poor people live. That is not how I wanted it to be, but I felt like there was no other way for the situation to be taken in by them. I felt like I was an inspector coming to find errors in the way they lived, although that wasn't my intention. In hindsight, although the evening seemed a bit uncomfortable, especially because we didn't get a chance to chat with the family at all, I valued the opportunity to spend a night in unfamiliar territory and only wish we had time to get to know the family who we shared a roof with.

That day, we did home visits with the Enthembeni Health Project in a local township community. Although it was wet and cold outside, we walked from home to home checking up on the people infected with HIV to make sure they were having human contact and support. The first place we visited was the only place with heat – provided by a hot plate in the center of the room. As we huddled around it, I could feel the connection between our 2 outreach workers and the mother they were coming to check on. One of our outreach workers was HIV+, and she explained to us all how she was not going to let the disease control her, and that she would put on a dress and heels and walk proud. Her positive spirit as we sat in the cold, damp room was incredible. I wondered, given the same situation, if I could so the same. I wasn't sure of that answer, but thought to myself how special this group of women was to this community. When we went back to home base to have lunch, the enthusiasm of the director of this project was lively and sensed no sign of burnout or fatigue – only hope and energy. As we ate the lunch they

prepared for us, I understood what a pivotal role human outreach, not just medication, plays in combating infectious disease.

The remainder of our time in KZN was spent visiting various clinics and health organizations. We met with someone at the Valley Trust Health Project, the Asenze Project and the Don McKenzie Hospital (TB clinic). In all of these places, there was a shared concept of lack of resources carried by the shoulders of a few medical professionals. At two of these sights, we spoke with the doctors that lead the operation and discussed the challenges they face within the walls of the clinic. At the TB clinic, I was shocked to see that the head doctor didn't have a computer – only one phone that kept ringing until he picked it up. I wondered how much more he could be of service had he the proper tools in which to do so – a secretary and a computer would be a good start. I left wondering how much of his time was spent doing administrative tasks etc. This led me to the concept of NGO's as a whole and intention versus output. I really wonder how much more productive these clinics would be if they had the proper resources. As the doctor at the TB clinic said, "This facility is very poorly resourced, putting more strain on an already crumbling health system."

After listening to his daily struggle just to operate the facility, I'm curious as to what motivates him each day to continue. I think it takes a special kind of person to get up each morning knowing the struggle (that is growing at an exponential rate) that lies ahead. It is here in South Africa that I have met some of these incredible selfless people. We ended our time in KwaZulu-Natal in the beautiful town of St. Lucia before heading back to Cape Town. It was in this memorable week the phrase, "this is Africa" became common place as a response to any dysfunction we encountered.

Week Five

In our final day of lecture we watched the documentary "Journey through South Africa," by Paul Weinberg as well as paid a visit to the visual media archives at UCT. This video highlighted several important key points for me. I not only enjoyed the photos, but the stories behind them. I also enjoyed the insight that Mr. Weinberg was able to share with us from his position behind the lens during and post-Apartheid. It's obvious that photo journalism plays an important role in preserving the past, but it is not so obvious its role in exposing differences between people and the perceptions that form from such photos. Mr. Weinberg gave us a refreshing perspective on the issues of poverty, decimation and disparity within changing South Africa.

I was fascinated by one particular phrase he stated: "South Africa imagined versus South Africa experienced." He asked us to think about that – and what we imagined SA to be and what it is in reality now that we have spent a few weeks here. For me, South Africa imagined was unimaginable. I had heard about its history and unrelenting poverty levels and have seen similar poverty stricken areas in other parts of the world. I have also learned about similar acts of violence taking place in the name of freedom and change, but I never could have imagined what my SA reality has been like.

My SA reality is one of silent color segregation and not so silent financial segregation. It's hard to imagine a country post an Apartheid regime, and I guess I hadn't really filled in the gaps to what that would be like. I almost glossed it over in my mind in a way, waiting for reality to fill those gaps. I try not to make any assumptions or color my own picture, so my experience here was very new and unique. Often when you travel abroad you can attempt to imagine your surroundings, what the people will be like etc.,

but with South Africa, I felt it to be unpaintable. I would have to experience it for myself to gain a better picture of its reality. Mr. Weinberg also said that Cape Town is the most unequal city in the world. This is something that resonates with me the strongest. The drive to Cape Town, passing the Cape flats with miles and miles of townships along the way is mind numbing. It almost doesn't seem real – until you get a chance to step inside these areas. Generally speaking, rural slums don't provide the same shock value to me, as I've encountered this in parts of Central and South America. But the urban slums, and the sheer quantity of them, is something I had never imagined in my head.

The other thing that resonated with me about Mr. Weinberg was that he seemed to be the first person (in speaking about South Africa), to give a real human touch to the topics surrounding global health and poverty. What I mean by this is we hear lectures all day about various issues and possible solutions, but it almost seems to be in a very detached way. It is like you have to distance yourself from the actual meat of your research or work as to not get caught up in the horror of it – because if you did – you would never get anything done. We all do this in a way, but Weinberg was the first to really express the confusion and terror behind it all. He says "a day doesn't go on without asking 'why?'" By the nature of his work as a photographer, it is his nature to investigate the faces and situations behind what his lens captures; this is quite a distinction from our research based lectures. I enjoyed this unique perspective on the public health and social inequity problems of South Africa. It's easy to get lost in the facts and statistics of research, and it's human nature to not dwell on the sadness behind the statistics; in fact we need to do this to solve problems and find solutions. But I guess it was a refreshing perspective to hear someone seek sadness and sit with it for a moment.

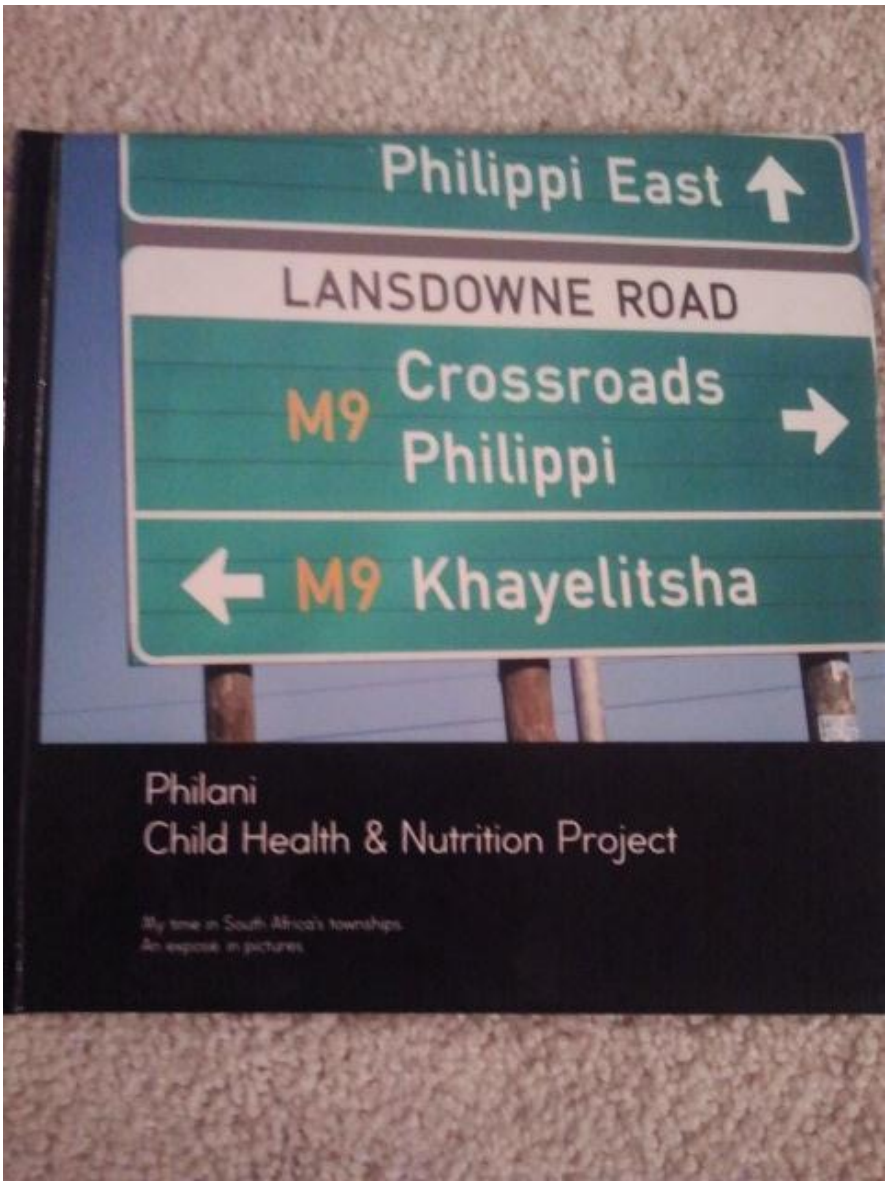
APPENDIX B

Photo Journal

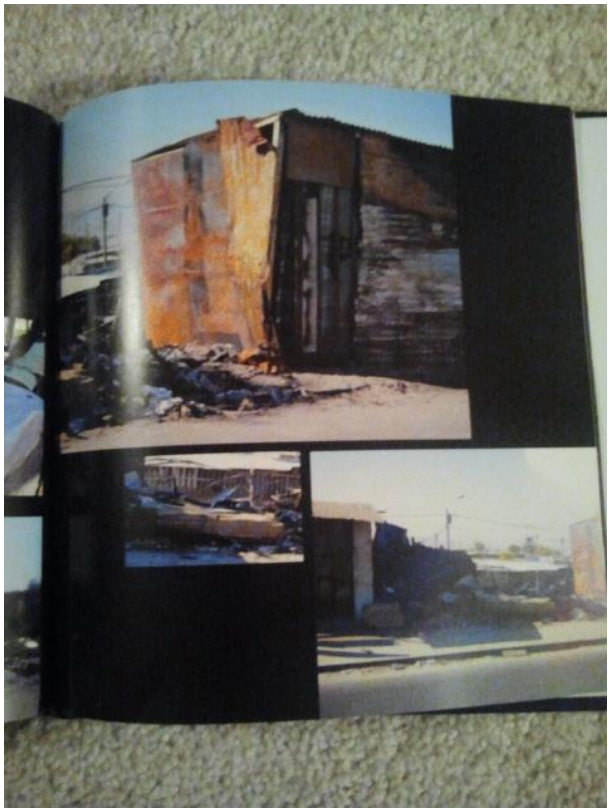
Visual exposé of the Philani Child Health & Nutrition

Project and the townships they serve

Cover



Sample Pages*



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