

**Framework in Global Health**  
**Global Health Scholars Program**

**February 2009 Fellowship Recipient**

**Proposal Title:**

**“Body Image in KwaZulu-Natal Province, South  
Africa”**

Global Health Scholarship Proposal

**Body Image in KwaZulu-Natal Province, South Africa**

**Faculty Sponsors:** Dr. Stephen McGarvey, & Dr. Abigail Harrison.

**Foreign Site Sponsors:** Dr. Till Barnighausen of the Africa Centre Health and Population Studies, KwaZulu-Natal Province, South Africa

**Project Dates:** June 1<sup>st</sup> – August 15<sup>th</sup> 2009

**Proposed Budget:**

Non-Travel Expenses:

Housing: \$200.00/week = \$2,000.00

Food: \$150.00/week = \$1,500.00

Research Assistant (Translator): \$200.00/week = \$2,000.00

**Total: \$5,500.00**

Transportation Costs

\$2,300.00 = RT Airfare from Providence, RI to Durban, SA

\$300.00 = Transportation from Durban to Africa Centre

**Total = \$2,600.00** This amount is to be paid by the Foreign Studies Fellowship pending revised detailed plans and IRB approval.

**Introduction:**

Body image is a multifaceted construct encompassing one's perceptions, thoughts, feelings and actions regarding one's body as well as the community's perceptions, thoughts, feelings and actions concerning body morphology. Body image is an important public health issue operating through perceptions of body size and shape and having both mental and physical effects on an individual as well as on the community. Studies conducted in South Africa and other international locations have suggested that body image is an important factor associated with an increased prevalence of obesity (Mciza et al 2005).

Obesity and obesity related health disorders were once considered diseases of developed countries. In reality, recent projections predict that within 15 years, nutrition related chronic diseases will account for over 60% of the disease burden in developing countries (Caballero 2002). South Africa has not been spared from what is quickly becoming a worldwide pandemic. Studies conducted in the 1990's revealed obesity rates amongst black women in South Africa to be 34.4%, 53.1% and 53.4% (Mollentze 1995, Renzaho 2003). In KwaZulu-Natal, a recent study reported that of 2543 individuals within the Africa Centre surveillance area, 58% were overweight and 32% were obese (Barnighausen et al 2008). The need for addressing body image as a public health concern for South Africans is becoming strikingly apparent as the obesity and obesity associated disease rates continue to climb.

It is understood that the perception of ideal body size varies with culture, ethnicity, educational level and socioeconomic status (Holdsworth et al 2004). In KwaZulu-Natal the population is predominantly composed of black South Africans of Zulu ethnic origin. Several studies have found that among black Africans, there were no negative social connotations regarding being overweight or obese. Instead, fatness was associated with wealth, prosperity, increased social status and happiness (Holdsworth et al 2004, Kruger et al 2005).

The failure to identify oneself as obese in KwaZulu-Natal has created a self-reported rate of obesity in black women of only 15%, despite the 32% true obesity prevalence (Faber et al 2005). In addition, the high HIV/AIDS prevalence rates impact most every aspect of daily life in KwaZulu-Natal. HIV/AIDS causes a variety of symptoms; some of these are easily visible leading to unintentional HIV status disclosure, which may translate into increased social isolation and stigma. In a 2003-2004 population based study conducted in rural KwaZulu-Natal Province, HIV infection was shown to reduce BMI by 1.9 units. This translated to approximately 5 kg for an individual of average height (Barnighausen et al 2008). Preliminary research suggests that many African women do not want to lose weight for fear that they will be labeled as HIV positive and face the backlash associated with this social stigma and discrimination (Faber 2005). A study conducted in 2003 of community health care workers looked at barriers to healthy living in Cape Town, South Africa. 17 community health care workers were specifically selected to explore attitudes beliefs and perceptions of hypertension. One participant noted that, "I am scared of exercising because I will lose weight and people may think that I have HIV/AIDS." (Sengwana and Poane 2004). This fear of losing weight poses a great obstacle to reducing the overweight/obesity rates in South Africa.

This lack of recognition of obesity in combination with the fear of HIV stigma may present problems in the prevention of non-communicable obesity related diseases such as cardiovascular disease and diabetes. Weight control is of critical importance but with the current beliefs surrounding proper or ideal body size, it is a daunting task to reduce the rate of overweight/obesity in South Africa. Current methods of assessing body image in South Africa and elsewhere may not be sufficient for assessing these factors in rural KwaZulu-Natal due to the complex interplay between traditional body image ideals, the nutrition transition and the high prevalence of HIV/AIDS. The purpose of this proposed research is to conduct qualitative research to better understand body image in this setting. This research could be used to develop a set of body image tools applicable to black South Africans in rural KwaZulu-Natal, which may eventually lead to a culturally relevant intervention design for overweight/obesity in KwaZulu-Natal.

### **Objective:**

I plan to gather qualitative data on what body image ideals are in KwaZulu-Natal. By conducting focus groups and structured in-depth interviews, I will learn attitudes and health related knowledge that influence and shape body image ideals, body size preferences, perceptions of health risks associated with overweight/obesity, the impact of the nutrition transition, and the impact of HIV and body size including the potential for HIV/AIDS stigma related to body size and shape. I will use the data for my Master's

thesis for the Master of Public Health program. The information I gather will be helpful for future studies of assessing body image in this setting and potentially useful for designing culturally relevant interventions for overweight/obesity and related health disorders.

### **Methods:**

Obtaining qualitative data on which factors are important, and how big a role they play in shaping body image in KwaZulu-Natal is critical to future research in this area. I plan to gather qualitative data in two ways.

The first method will be a series of 8 focus groups of 8-10 people each conducted in rural KwaZulu-Natal. I will work under the supervision of Dr. Till Barnighausen, a clinician and HIV epidemiologist at the Africa Centre for Health and Population Studies. In collaboration with local research staff, I will recruit local community members from within the demographic surveillance system (DSS) established by the Africa Centre. These focus groups will be conducted in Zulu, which will later be transcribed into English by a research staff member of the Africa Centre. Only black South Africans will be included in the focus groups and each group will be divided by both gender and age. I plan to conduct 2 focus groups with each of the following categories: older women, younger women, older men and younger men. The exact age cutoff points are yet to be defined and will depend on guidance from the Africa Centre collaborators. This design will allow me to observe any perceived body image differences between the sexes as well as generational differences due to the nutrition transition and the economic development of South Africa.

I will be asking questions designed to probe for perceptions of one own body image, preferences and assumptions regarding others' body and shape, assumptions of health and HIV status based on body morphology, as well as the community's understanding of obesity as a risk factor for non-communicable diseases and assessing whether there is motivation for weight control.

To supplement and contextualize the information gathered from these focus groups, I plan on conducting twelve semi-structured in-depth interviews with individuals designated as key informants. These key informants will be individuals with insight into the community ideals and social attitudes surrounding body image and health literacy in KwaZulu-Natal. Examples of such informants may be researchers working on cardiovascular disease in KwaZulu-Natal, community health workers, or community leaders. I will work with the Africa Centre as well as relying on my own interactions with individuals in KwaZulu-Natal to identify which individuals will be the most helpful key informants. IRB approval will be sought from both Brown University and the University of KwaZulu-Natal.

### **Relevant Course Work and Training:**

In order to prepare myself to conduct this research I have taken PHP2120 Introduction to Epidemiology and PHP1070 Burden of Disease in Developing Countries. Currently I am enrolled in Qualitative Methods in which I will be developing a detailed

agenda to be followed in both sets of focus groups and the in-depth interviews. Through this class I will learn how to conduct qualitative research as well as how to analyze qualitative data. Additionally, I have been meeting with Dr. Abigail Harrison who has conducted qualitative research in KwaZulu-Natal, and I will continue to meet with her as I design the questions for the focus groups and the in-depth interviews.

As my experience and knowledge of qualitative research grows through my course work and with the help of my advisors, I will be able to specify my week-to-week plans to ensure there is enough time and resources to fully address the full scope of this work.

### Note

Attached is the Letter of support written for the Foreign Studies Fellowship application. In order to avoid needlessly bothering Dr. Barnighausen, the same letter of support is being used. While the name of the scholarship has changed, the sentiment of support is the same. I appreciate the committee's understanding.

### References:

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Global Health Scholarship Proposal Addition

## **Body Image in KwaZulu-Natal Province, South Africa**

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### **Data Analysis and Disseminations:**

In both the focus groups and the in-depth interviews, participants will be asked a series of questions regarding body-image as described in the previous application. Additionally, participants will be asked a series of questions regarding cultural relevancy of figure rating scales.. All of the body image questions and the figure rating scale questions been selected after a careful literature review of body image in sub-Saharan Africa, and other similar settings.

A research assistant from the Africa Centre will conduct all focus groups and interviews in Zulu. These will be recorded using audiotapes. Shortly after the conclusion of the focus group or in-depth interview, the research assistant and I will sit down and translate the conversation to English and transcribe the focus group/in-depth interview. Once the transcription is complete, I will read over it identifying any terms or phrases that need further clarification. Additionally, I will begin reading the transcription and conduct preliminary coding to assure saturation of all anticipated themes and evaluate the transcript to see if any new areas of interest need to be addressed in future focus groups/in-depth interviews.

Once back at Brown University the transcripts will be coded for themes associated with body image in KwaZulu-Natal. This coding will allow me to identify the connections and differences between the focus groups and in-depth interviews and identify patterns that are present in the data. The previously identified themes of interest ( 1) attitudes and health related knowledge that influence and shape body image ideals 2) body size preferences 3) perceptions of health risks associated with overweight/obesity 4) the impact of the nutrition transition 5) the impact of HIV and body size including the potential for HIV/AIDS stigma related to body size and shape) will be evaluated as well as any new themes that are discovered throughout this study. This information will be used for my MPH thesis with the potential to publish any significant findings. This information gained from this study will be given the my collaborators at the Africa Centre for Health and Population and will provide insight for future research on body image and obesity in addition to potentially guiding the way towards culturally relevant weight loss interventions.