

## **“Research in Spirituality and Obesity”**

Kenneth F. Ferraro, Ph.D.

*[The following is a transcript of Dr. Ferraro's presentation on the first day of the April 1-3, 2003 conference: Integrating Research on Spirituality and Health and Well-Being into Service Delivery, held at the National Institutes of Health in Bethesda MD, sponsored by International Center for the Integration of Health and Spirituality, et al.]*

Good afternoon. I just want you to know I am having a grand time. I think the conference organizers have done a spectacular job. I am pleased to be a part of it.

I take special note of the fact that they have got NIH people being the moderators/timekeepers. So I think there may be a message there, maybe "cut it off," or "if you don't stop we are going to cut something off." So I am going to be very timely this afternoon, I will guarantee you that.

The topic of religion and spirituality in obesity is one that I happened upon several years ago, basically interested in health protective behaviors. Part of what I found was that there were a number of studies out there that reflected some interest related to this but very little directly on the subject.

One of the things that I noticed was that most religions had some kind of norm or had some expectations about body weight and about the activities of individuals who were adherents of those religions. For instance, most religions have either prescriptions or proscriptions about specific foods, that there are certain foods you are not to eat and certain foods that you are to eat.

Few religions, however, give explicit mention to the topic of obesity. There is good reason for that, because most religions that we are familiar with were formed at a time when obesity was a very, very rare thing. It is not anymore, and we will get to that in a few moments.

If you think about it in historical writings, there are some mentions of related topics, though obesity may not come out or the term may not be used. You do find, for instance, in the Book of Proverbs and also in Deuteronomy, references such as, "Be not among wine-bibbers or among gluttonous eaters of meat." So it is not really obesity, but it is gluttony. It would be interesting if there would be some mention about gluttonous eaters of broccoli, but there is no such mention.

So I don't know if there is a problem with eating too much broccoli, but there is certainly a concern here with eating too much meat. You also note that there is a linking of alcohol consumption with gluttony here.

There are clearly religious prescriptions and proscriptions about food. You might recall from the Book of Judges, this King Eglon who was slain by the sword, and I will spare you the details, but the Book of Judges describes this man as very, very fat. So you can see it there.

Other religions, you see emphasis upon asceticism, upon moderation, upon restraint, upon control of the body, on integration of body and mind. So, if you really think about it, most religions talk about the body and make references to food consumption.

Let me talk just a little bit about what obesity is so that we make sure that we are all on the same page. What I am going to do is just simply use the guidelines from the National Heart, Lung, and Blood Institute released in 1998. Again, if you are familiar with this, pardon the elementary presentation. But

just to give us a feel for what obesity really is, this is a body mass index of 30 or greater. Body mass index is your weight divided by your height squared to adjust for the fact that tall people shouldn't be penalized as being considered overweight just because they are tall. I have given you here just an illustration. So, if you want to sort of put your height in there somewhere and try to get a sense of where you are.

I didn't create this demarcation, I'm simply reporting it, but this would give you some sense of where you are and whether you could conceptualize what you would have to gain to make yourself an obese person.

Overweight and obesity in the United States I oftentimes liken to what has transpired with smoking. Smoking, I think the surgeon general's report in the '60s was great attention to the public health problem. I think we are now at that point with obesity and overweight in the United States, that we are waking up to it. I think we are really just seeing the crest of the wave in terms of its impact on the public health.

If you use the National Heart, Lung, and Blood Institute guidelines, there is roughly one-third of the U.S. population that is overweight. Now, look very carefully, please, because this is one-third between 25 BMI and 29.9. Then you would add the 22.3 percent that would be classified as obese, 30 and over, to come to the conclusion that the normal thing in America is to be abnormally overweight.

So the majority of the population is overweight and there is a huge discussion now as to whether overweight is a problem versus obesity is a problem. Other presenters may discuss that this afternoon as well. Most of my research, in a nutshell, shows that obesity is the problem, not overweight. That is relaxing a whole lot of people in the room right now, including myself, maybe. We all want to recognize that this is something that has grown immeasurably in the United States. When we look at previous research on obesity and spirituality, we find a number of things, and I would like to point that out. First of all, very little research on spirituality. Most of it is really on religion and body weight.

Secondly, there are different types of study, as you would expect, different types of study designs. There are ecological studies. If you use the American Public Health Association's report card on the states, you can look at correlational data of states that have high levels of obesity and have high levels of religion, as well as survey data. So we go out and survey populations. Not clinical samples but population surveys. If you look at sample surveys, there is data there as well.

Probably the biggest weakness of this literature is that most of these studies -- I can almost say I think all of them -- are cross-sectional in nature. I think that is one obvious thing that needs to be changed.

One of the major findings is that religious groupings are related to body weight. Many studies find that overweight and obesity vary by religious grouping. Here are a few of them.

Ellen Idler kicked off our session this morning, and she shows that relationship among older people. I and Kim, Sobal, and Wethington, in a paper that will appear in the "International Journal of Obesity" later this year, shows that in an age range from 25 and over.

If we look at those groupings by religious denominations and obesity or just look at body mass index groupings, this just tries to give you sort of an unadjusted summary of average body mass index.

In the top section, those three groups, Southern Baptist, Protestant Fundamentalist, the Pietistic Protestants, those are the groups that would have the highest level of BMI. You see the non-

denominational Protestants, Catholics, and non-traditionalists in the middle. The "nones," the Protestant-Reformation Era, Jewish and non-Christian denominations, or non-Christian religions, have the lowest.

So the long and the short of it, when I first started studying this, I was interested in health behaviors and I thought that religion was going to have a protective effect on health because that is what most of the literature said. So I thought that Christians and Fundamentalists and more religious people would have lower body weight. I found out just the opposite. It took me a long time to figure out why and to try to explain it. That is the odyssey that I am relating to you today.

A couple of other findings that I think are important. Not only in terms of religious grouping but actually levels of religiosity or religious participation are positively associated with average body mass index and rates of obesity.

Secondly, most of these relationships are observed independent of socioeconomic status. You may be saying, if you look at those religious groupings, you can see that those denominations vary by socioeconomic status. I am very well aware of that. The models in most of the analyses that I am referring to today control for measures of social stratification.

Third, those relationships may partly be explained by other health behaviors, probably the most notable being smoking. If you look at the multivariate analyses compared to the bivariate analyses, usually the relationship between religiosity and body weight attenuates somewhat when you control for smoking. A couple of studies actually show that the relationship disappears when you control for smoking. Others show that it does not disappear but it is weaker.

That doesn't mean that what we would tell people to do is to go out and start smoking. It is just simply to say that these health behaviors are related. Some people smoke as a mechanism to maintain their weight or as an appetite suppressant.

So, why the link? I don't think that we have definitive answers here, but I welcome you to consider the journey. Those of you who are in service, I would encourage you to think about it in your clinical populations.

One of the first things I recognized is what I call trivializing gluttony as a sin. There are many ways to dig graves. We usually think of doing that with a shovel, but you can also dig a grave with a fork. I think in American society there are many religious groups, pastors or preachers or religious authorities, who will stand up and say, I have never had a drink in my life. They will never stand up in the pulpit and say, I have never overeaten in my life, or I have never needed Roloids or Tums after a meal. It is not considered to be a big problem.

Secondly, the legitimacy of food for celebrations. Food is one mechanism to celebrate, and especially if you don't consume alcoholic beverages, food becomes the medium of celebration. So, when there are religious holidays, religious celebrations, church potlucks, whatever, that certainly is a factor.

Smoking prevalence, which I have already mentioned.

Even as Dr. Ellen Idler mentioned this morning, religious organizations are oftentimes welcoming. So, it could be that religion is having an effect on eating behaviors and this movement toward obesity. It could also be that obese people find that they are welcome at churches, temples, and synagogues.

Other mechanisms. Higher fertility among religious persons, especially when we think of higher obesity rates among women. Some of the religious groups that I showed you also have higher fertility. So, they have higher fertility and they have higher rates of obesity. Is there a relationship between parenting and weight gain?

Life course position. Most of the weight gain occurs in middle age. Very little weight gain occurs in later life. People start losing weight in later life. That is an issue, however, that also comes along with raising children. Does religion rise in salience in middle age, and what does that do in terms of life-course position?

Related to that is population aging. We are seeing an historical trend toward overweight and obesity in our society. At the same time, we are seeing the baby boom aging. There may be a colinearity here as well.

I think it is important to recognize the consequences of obesity. I just need to state that obesity is a significant health risk to premature disability and mortality. I think the other thing that we found in our research was a counterbalancing effect. That is, obesity lessens the quality of life among spiritually inclined persons. Some of the persons in our survey that have the highest levels of well-being in terms of physical and mental health are spiritually inclined persons. But among those that are obese, there is a dampening on that effect.

I am a professor, so let me profess just a couple of points before you today. Number one, I think we need to recognize that obesity at any time during the adult life course heightens health problems. There is something about reaching 30 BMI that changes the blood lipids or the glycation of proteins. A 30 BMI, in most of the research that I have shown, is a very dangerous point to be in.

Secondly, I would say that many religions do a disservice to their adherents by trivializing obesity as a health risk. I remember when we first published the firm-believers study that one prominent evangelical said, well, God is more concerned about my soul than my body. So I think that kind of thinking is not going to be really protective and pastoral in the truest sense of the word. Finally, obesity reduces the health benefits of spirituality.

Let me conclude with just needed research. We need research on religious norms of body weight. Do religious congregations understand or have any conception of body weight? Some do, it is very clear. Seventh Day Adventists, Mormons, others, they have norms about body weight. Leadership positions are oftentimes withheld from individuals who do not fulfill those norms.

Secondly, we need to know more about the association of diet and other health behaviors among spiritually inclined persons.

Third, we need more on the intervention side. How can we couple weight loss programs in religious communities? Intervention through religious organizations is very promising.

Thank you.