Supercourse Newsletter Mar. 4 2012 www.pitt.edu/~super1/

Forward this to people you know who liked Elvis, Houdini, and Oprah

Dear Superfriends,

1%

In recent months we have heard over and over about 1% across the world. "Stop Wall Street" has become a global movement. Don't worry, the Supercourse is not a part of any political movement. However, perhaps we should start our own epidemiologic movement, not targeting the upper 1%, but rather the lowest 1% across the world.

## Elvis was homeless

"Home is the place where, when you have to go there, they have to take you in" (R. Frost)

In the past few weeks I have been reviewing much of the epidemiologic literature on homelessness and health. It has been somewhat like Epidemiology Dumpster Diving as one can find some very good epidemiologic literature but for the most part there is not much literature and what there is perhaps should be in a dumpster. The lower 1% comprises mainly homeless worldwide, with a very high frequency of homeless vets.

I was very pleased as to the response concerning homeless in your countries. There appears to be an epidemiologic awakening for the homeless and the homeless vets.

We have not looked much at the epidemiology of the bottom 1%. It is not exactly clear why. However there are there are many very interesting questions.

How many homeless and homeless vets are there? The most common estimates of homeless and homeless children in the world are 200 million homeless and 100 million homeless children. These estimates have been used by the UN and other agencies. There never have been confidence intervals around these figures. These change dramatically for countries with natural and manmade disasters. We are in the epidemiologic dumpster for these estimates. For the US the estimates for homeless are 600,000 to 3.5 million. For US veterans the estimates are from 40,000-100,000. A major problem is that the <1% are difficult to count. There have been some nice studies using capture recapture to get better estimates. We know little about if the rates are increasing, but they are very likely to with global house evictions rising in most countries.

There are several things we can do. The first is to develop a standardized definition of homeless. (Is someone on the street 5 nights a year homeless?). Individual countries have definitions but we do not as epidemiologists. Second epidemiologists and governments need to get a better count of the homeless in Census and national health studies. This is difficult as the homeless are difficult to count. Third we should employ capture recapture to estimate how many we miss.

1% death rate: Life expectancy of the homeless and homeless vets hovers around 45 years. It appears that the rapid rise of life expectancy of 30 years in the world did not occur in the homeless? This is a most fascinating epidemiologic question as to why the homeless have been left out of improvements in global health. Also, why there has been so few epidemiologic studies examining a group having a lower life expectancy than many cancer and AIDS patients.

## Oprah was homeless

"He is happiest, be he king or peasant, who finds peace in his home" (Goethe)

Epidemiology definition of homeless: A basic problem with the epidemiology of the homeless is the terms that are used: bum, hobo, panhandler, scrounger, rustler, tramp, vagabond, untouchables, guttersnipe, street urchin, throwaway. It is no wonder that epidemiology has not paid attention to the bottom 1%, as these are dehumanizing names for them. We do not say something negative when people develop measles, die in a car crash, or develop lung cancer. We often dehumanize the homeless, and we do not view them as part of "our" population. Perhaps the term "lowest 1%" is better as this indicates that they are still one of us in society. Also, it may be easier to operationally define and standardize. The existing terms marginalize the homeless, the term the lowest 1% may not

Fascinating Epidemiologic questions: Epidemiology is known for its redundancy, we often do something, over, and over, and over, e.g. smoking and cancer. The lowest 1% can answer so many questions as they may be the most exposed humans to outdoor air pollution, heavy metals, allergens, food bacteria in dumpsters, etc. They are susceptible to many environmental diseases including COPD, Asthma, dermatitis, frost bite, and allergies. It has been fascinating as I received over 20 notes from people at the EPA, environmental scientists, and NIEHS. They knew of few efforts to investigate the environment and Homelessness, and no group has a major program of study. Is homelessness genetic? What are the risk factors for the death of the 1%. What is the frequency of food poisoning from food from dumpsters? Why are the homeless murdered? What are the environmental exposures on the bottom of a dumpster or in a garbage dump? Can we do a randomized trial of injury prevention in the homeless?

Causes of Death: In the US the 6 leading causes of death are: 1) Heart disease, 2) Cancer, 3) Stroke, 4) COPD, 5) Accidents, 6) Alzheimer's. Data on the causes of death in the homeless are limited but are very different then we see for the upper 99%: 1) Accidents, 2) Drug Overdose, 3) Suicide, 4) HIV, 5) Cancer, 6) CHD. The homeless appear to have very different causes of death then the rest of the population. Why? Epidemiology can find out. We can research and attack the causes of death for the 1% as much appears to be preventable. Why are the homeless at such a great risk for frost bite, asthma, diabetes, depression, foot ulcers, AIDs? We will never find out until we do at least one case control prospective study, or case crossover.

## Houdini was homeless

"We're a long, long way from home. Home's a long, long away from us" (Springsteen)

Disaster Homeless: Isn't it a bit ironic that when a disaster occurs billions of aid dollars are spent to research and house the homeless. Walter Hayes produced a wonderful lecture on disasters and Homelessness: <a href="http://www.pitt.edu/~super1/lecture/lec46101/index.htm">http://www.pitt.edu/~super1/lecture/lec46101/index.htm</a>. At the same time 1000s more homeless are in the population and never paid attention to by us epidemiologists.

Despite the enormous problems of the <1%, with increasing numbers there is little epidemiologic. We need to change this.

mVETs: We are planning to target one specific group, the Homeless veteran. They are 3 times more likely to be homeless in the US, and 10 times more likely to die. We likely will be providing a free phone to each one, as communication can help to reduce death. We also are planning for mVET global, looking at the health of homeless VETs across the world. The Russians have, for example, a very large homeless vet pool. To save lives they have created "parts of cars" where the homeless can have a car to live in, especially in the -20 degree temperatures, and to lock up their goods. Let us know if you have information about homeless vets in your country. Please write to me at <a href="mailto:ronaldlaporte@gmail.com">ronaldlaporte@gmail.com</a>

Are the homeless the Nomads of our times?

Epidemiology and the Homeless: There is virtually no epidemiologic research examining the lower 1%. Our NIH grants require us to include women, different races, and children in our studies. The homeless have a 5-10 fold greater risk of dying then these groups. Perhaps our grants should be required to increase homeless vets and others in all our environmental, psychiatric, AIDs, Diabetes, etc studies as the lower 1% have very different diseases, and much of it is preventable.

We as epidemiologists need to look at homelessness as an epidemiologic issue which can be attacked with our epidemiologic tools. I would most appreciate your thoughts at <a href="mailto:ronaldlaporte@gmail.com">ronaldlaporte@gmail.com</a>.