

## Cancer and Chronic Diseases in Minority Populations: The Need for More Educational Materials in Spanish for Healthcare Providers

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**Abstract** This short communication piece provides an overview of the Latin American Supercourse, a collection of public health lectures in Spanish targeting educators in Mexico, US, and Spanish speaking countries.

**Keywords** Internet · Prevention · Cancer · Education · Communications · Public health

Minority populations and immigrants represent highly vulnerable groups, both in the US and around the world. In order to improve cancer prevention education in Spanish speaking countries, as well as in order to implement effective interventions with Spanish speaking minorities in the US, there needs to be access to high quality educational materials, for both, patients and educators. Global Health network Supercourse project, developed at the University of Pittsburgh is a library of over 4,500 online lectures and a network of nearly 50,000 health professionals and scientists from 174 countries [1–4]. Over 600 lectures in the

Supercourse collection are available in Spanish language. Supercourse pages in Pittsburgh and Supercourse Mirror Servers (including the biggest one in the Library of Alexandria Egypt) around the world get approximately 75 million hits per year, making this project a popular medium for information exchange in the area of public health. These educational modules can serve as effective tools to deliver information about cancer prevention and cancer management, especially among Spanish speaking minorities. Disparities in cancer detection, treatment, and outcomes among racial/ethnic minorities and low-income patients are well documented [5]. In the US, minorities are more likely than whites to be diagnosed at a later stage of cancer, when effective management of the disease becomes difficult. This may be due to many different factors, including less knowledge about cancer symptoms and reduced access to cancer screening services. Supercourse lectures, both in Spanish and English can potentially help to solve some of the problems relating to lack of knowledge.

Cancers of the stomach, liver, and uterine cervix, all of which are related to infectious agents, are more common in developing countries, especially in Central and South American countries and parts of Asia. In the US, the incidence and mortality rates of these cancers are higher among Hispanics than non-Hispanic whites, especially among first-generation immigrants to the US [6]. In the US, the rate of cervical cancer is two- to three-times higher among Latino women, than in white women, making cervical cancer awareness one of the important healthcare priorities for this community. The Hispanic and Latino population is the fastest-growing minority in the United States, thus availability of information on cancer prevention and public health in general in Spanish language becomes very important. This poses a challenge for

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educators and healthcare providers who work with Spanish speaking populations, as they need access to latest developments as to how best approach such communities. Similarly, updated information in Spanish language is very much needed for the treatment of these conditions, both in the US and Spanish speaking countries.

Spanish language Supercourse has been initiated in 2002 with a collaborative project between researchers at the University of Pittsburgh and the School of Nursing and Obstetrics of Celaya, from University of Guanajuato, Mexico. This collaboration started with the faculty members in the school of nursing translating some lectures from English to Spanish, on topics most relevant to public health in Mexico. This new library, called Super Curso Latinoamericano, has been formally initiated in 2007 to overcome the language barriers and to ensure that global health knowledge reaches more health professionals in Spanish speaking countries. Our preliminary analysis, conducted with the help of Google Analytics demonstrate that epidemiology lectures, including those on cancer epidemiology are the most popular among Mexican faculty members. In similar manner, these lectures can be used to reach out to doctors, educators, and nurses who work with Spanish speaking immigrants in the US.

Various quality control measures are utilized in the Supercourse, including traditional quality control and newer online review methods [7–9]. Health professionals in Latin American countries have little access to continuous education materials in the field of public health. Some of the barriers include lack of English skills, poor connectivity to online journals, financial limitations, etc. Another big challenge is that for example in Mexico, there is large number of villages that do not have electricity, making it difficult to use computers and online resources. In the development of Latin American Supercourse, we found that it is difficult to encourage scientists and educators from Latin American countries to contribute lectures. Only 100 new lectures have been collected in the past 2 years from Mexican faculty members, with most of them coming from School of Nursing in Celaya. We found that the common misconception or harmful stereotype among Mexican faculty members is that they feel that if something is free, the quality might be poor. Ironically, since Supercourse library is available completely free of charge, some Mexican medical doctors and scientists are reluctant to using it.

In the US, limitations such as low literacy rates, poor knowledge about cancer treatment, and other challenges [10–13] may serve as a barrier for the use of the Supercourse directly with patient population. Thus, the main focus of the Supercourse is the healthcare provider.

While in the development of this effort we are experiencing challenges, interesting solutions are also emerging.

While the number of computers and telephone landline in Mexico is relatively small compared to population size, the number of mobile phones is continuously growing. Approximately 75% of the population in Mexico has access to cell phone. In a population that has limited access to computers, but good access to cell phones, cell phones can become a good medium for sharing public health information. Thus, Supercourse materials can potentially be downloaded through mobile devices, including simple cell phones, smart phones, ipads (or tablet computers), etc. Based on the fact that the topics of most interest to Mexican colleagues include primary prevention and early diagnosis of cancer, this type of information can potentially be easily exchangeable via cell phones. Use of SMS messages, which are virtually free of charge in Mexico, could be one of the viable options for low cost information exchange approach. Considering that not all doctors in Mexico have access to computers, simple cell phones can potentially serve as a medium for sharing technical and scientific information in text form.

Lack of training in global health and prevention of cancer and NCDs is also a concern, as medical schools traditionally focus on clinical work and not on prevention. Latin American Supercourse overcome these barriers by providing public health education materials on the Internet free of charge and in easy to access format. For those who do not have access to the Internet, DVDs are available.

We would like for everyone to join our effort by emailing to us at [super1@pitt.edu](mailto:super1@pitt.edu).

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