

TRANSLATING RESEARCH FINDINGS TO PEOPLE: PROTECTING THE HEALTH OF ALL COMMUNITIES

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INTRODUCTION

Racial and ethnic disparities are among the nation's most pressing health concerns. In 2000, 30% of people in the United States were members of a racial or ethnic minority group; by 2050 this proportion is expected to exceed 50%.¹ To achieve significant improvements in health, we must uncouple the linkage between diversity and disparity, and make immediate and substantial progress toward health equity in our nation.

One of the vanguard efforts of the Department of Health and Human Services to address racial and ethnic disparities in health is the Racial and Ethnic Approaches to Community Health (REACH 2010) program. In this supplement several REACH 2010 communities describe their successes after the first 3 years of intervention activities.

These communities have grappled with key issues related to implementing and evaluating strategies for eliminating disparities in health. The communities have demonstrated improvements in risk factor identification for heart disease and stroke, diabetes screening and treatment, breast and cervical cancer screening and treatment, childhood and adult immunizations, HIV/AIDS prevention, and infant mortality. The lessons learned from these communities must be disseminated to communities across the country to diminish disparities and protect the nation's health.

The intent of this special issue is to demonstrate the critical role that community-based participatory public health research plays in creating the evidence base for action to eliminate disparities. The rapid translation and dissemination of effective strategies to eliminate health disparities to people in all communities will accelerate our success in achieving true health equity.

RESEARCH FINDINGS

In the first article Giles and colleagues² provide a history and overview for the REACH 2010 program. In addition, they

describe the evaluation framework which includes 5 stages: 1) capacity building; 2) targeted actions; 3) community and systems changes and changes among change agents; 4) widespread risk and protective factor behavior change; and 5) health disparity reduction. This evaluation model has been widely accepted and implemented within the REACH 2010 communities and could be used by other communities addressing disparities in health.

Prior to conducting any intervention, communities conducted a needs assessment to determine the burden of disease within the community. Utilizing data from the REACH 2010 Risk Factor Survey, Liao and colleagues³ demonstrate the substantially greater socioeconomic (income and education), risk factor, and disease burden that the REACH 2010 communities bear compared to the general US population. The authors also report that the disparity within racial and ethnic groups is greater at times than the disparity between the Caucasian and minority population overall. These results clearly indicate the need to address the reasons why some communities thrive while others do not. The data from this survey have been instrumental in allowing communities to assess the burdens and improvements in health during intervention activities.

Asian Americans are among the fastest growing racial and ethnic groups in the United States.¹ In their article addressing disparities in cervical and breast cancer management among various Asian subgroups, Tanjasiri and colleagues⁴ use geographic information system mapping to assess and quantify the availability and accessibility of culturally competent breast and cervical cancer screening services among women in 7 Asian-American communities in southern California. Their results indicate that culturally competent services are not available for the vast majority of communities and that a dire need exists to address policy factors beyond individual knowledge and attitudes to improve cancer screening.

Several of the REACH 2010 communities are utilizing focus groups to assess major barriers to the elimination of disparities in health. Madison et al⁵ describe their use of participatory evaluation principles in designing and conducting a community survey of metropolitan Boston's Haitian community. In their article, the authors document how the findings from their formative research were used to build evaluation capacity and to provide a reliable data source to refine preven-

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tion interventions targeted at increasing the efficacy of efforts to reduce HIV transmission. In a similar manner, Kieffer and colleagues⁶ conducted 12 family-based focus groups among Black and Hispanic residents in Detroit to assess the community's knowledge, attitudes, beliefs, and barriers related to diabetes prevention. They also suggest concrete strategies to reduce disparities within the community. The information from both of these communities illustrates the value of formative research in designing and implementing community-based interventions.

Communities must assess the burden of disease prior to initiating intervention activities. Miller et al⁷ conducted a survey of 1,677 Black and 1,274 White men and women in Nashville to examine racial disparities in the prevalence of cardiovascular disease, diabetes, high blood cholesterol, and hypertension. They found that the prevalence of diabetes was 70% higher among African Americans than Whites and reported that African Americans had to travel further distances than their White counterparts to receive health care. The authors used this information to develop targeted interventions for addressing disparities in diabetes.

Public health research demonstrates that overcoming historical and institutional distrust are key elements in developing and sustaining community mobilization efforts to eliminate disparities. In their article Metayer et al⁸ describe their efforts to create a shared community vision for change among Haitians in Boston to combat the epidemic of HIV within the community. The authors describe the cultural, social, political, immigration, language, discrimination, and biological factors that the community had to overcome to achieve this shared vision. In a similar article, Fouad and colleagues⁹ describe their efforts to develop a community action plan to reduce breast and cervical cancer within the Black Belt in rural Alabama. They describe their process of bringing together 84 community volunteers to develop a shared vision for addressing deficits in breast and cervical cancer screening and treatment. Both of these articles are key reading for communities interested in coming to consensus to improve health.

Disparities in health within tribal communities are one of this nation's most pressing health needs. English et al¹⁰ describe a process of collaborative participatory research to assess the strengths and needs of a tribal community as part of public health capacity development. The authors note the importance of building relationships between tribal programs, along with relationships between tribes and the scientific community. The authors stress the importance of an orientation toward public health, the need for a comprehensive public health infrastructure, and the importance of prioritizing identified needs.

As communities begin to address disparities in health, one of the first steps is to identify barriers to health promotion. Miller and colleagues¹¹ report that major barriers to cardiovascular disease and diabetes prevention in Nashville were poor

access to healthy food choices, availability of safe places to engage in physical activity, and access to high quality health care. While the authors acknowledge that these barriers are not unusual in urban African-American communities, these factors served as the framework used by the community coalition to design and implement strategies for reducing disparities in cardiovascular disease and diabetes.

As communities carry out their intervention work, they must assess the changes in outcomes that occur over time. DeBate et al¹² in the Charlotte, NC, REACH 2010 community report substantial increases in knowledge of preventive behaviors, the development of health-related skills, and the diffusion of health information to family members during the 3 years of intervention activities. In a similar effort, Garvin et al¹³ utilized data from 7 focus groups and a pre- and post-survey to report substantial increases in physical activity and healthy eating among community residents in Seattle. Data from focus groups were also used to confirm the findings in this survey. The results from both DeBate et al¹² and Garvin et al¹³ document the widespread adoption of culturally competent diabetes education and support programs within the community—factors that are instrumental in eliminating disparities in health.

One of the greatest risk factors for cardiovascular disease and diabetes is physical inactivity. McKeever and colleagues¹⁴ describe their intervention efforts to increase the prevalence of physical activity within their community. As a result of their intervention efforts, almost 60% of community members reported increasing their level of physical activity. The authors note that their efforts resulted in a “movement” of healthy active living.

The infant mortality rate among African Americans is substantially higher than their White counterparts.¹ Hunte and colleagues¹⁵ in Flint, Michigan describe their community-based paraprofessional intervention aimed at reducing disparities in birth outcomes. The authors report that, as a result of their interventions, the proportion of women who received prenatal care in the first trimester increased substantially and, even more importantly, the disparities in birth outcomes were eliminated.

The PROCEED-PRECEDE model for community planning and health education and promotion has been used by health departments and communities around the country for approximately 2 decades. Darrow et al¹⁶ describe how they used this model and the results achieved. Among community members, knowledge regarding the importance of HIV as a health problem in the community increased by 25%, and participation in HIV prevention efforts increased substantially—a true testament to the value of the model.

Data from the REACH 2010 Risk Factor Survey at baseline have shown that the delivery of clinical preventive services among Latinos with diabetes is particularly low.³ Cleghorn and colleagues¹⁷ utilized a practice-based intervention that includes feedback to local healthcare providers. The authors demonstrat-

ed substantial improvements in the delivery of clinical care, such as ordering urinary microalbumin levels, prescribing ACE inhibitors and lipid-lowering medications, providing vaccinations for influenza and pneumococcal pneumonia, and counseling about physical activity and smoking cessation.

Cervical cancer rates are 5 times higher among Vietnamese women than their White counterparts. Healthcare providers, particularly those who are Vietnamese, play an important role in increasing cervical cancer screening rates among this population. Lai et al¹⁸ assessed the effect of Continuing Medical Education (CME) seminars in increasing physicians' knowledge about cervical cancer diagnosis and treatment; they reported that these seminars dramatically increased knowledge. Future evaluations will determine whether these CME seminars increase the actual delivery of cancer screening services among Vietnamese women.

African Americans with diabetes are substantially less likely to be knowledgeable regarding the need for clinical preventive services. However, data from King and colleagues¹⁹ demonstrate that just 2 years after the initiation of intervention activities, African Americans in Charleston and Georgetown Counties, South Carolina, were just as likely to understand the need for glycosolated hemoglobin and cholesterol screening, and kidney, foot, and dilated eye examinations as their White counterparts. In addition, data from the community's chart audits indicated substantial reductions in disparities in the delivery of each of these services.

Substantial disparities in childhood immunizations in Harlem and Washington Heights, New York, have been well documented. Over the last several years, Findley and colleagues²⁰ have been conducting intervention activities designed to reduce disparities in childhood immunizations utilizing an approach based on community empowerment and lay health workers. As a result of their interventions, disparities between levels of childhood immunizations in the two targeted communities have been eliminated.

CONCLUSIONS

It is difficult to summarize the results from 42 communities addressing 6 different disease conditions among 5 different racial and ethnic groups across the nation in a succinct manner. Vast differences clearly exist among all of these communities; but the collective evidence demonstrates that striking improvements in health have occurred across the communities. Many of these community coalitions were not experienced in conducting detailed research or evaluating interventions, yet the communities have been able to develop, implement, and evaluate interventions to reduce health disparities and document improvements in knowledge, changes in behavior (certainly much more difficult than improvements in knowledge alone),

and changes in outcomes (even more difficult, yet highly exciting!). Approximately \$100 million have been invested in these 42 REACH 2010 communities; the investments have led to substantial progress in eliminating disparities in health.

While 42 communities is a large number for a demonstration program, it is far too small an effort to truly achieve the ambitious national goal of eliminating disparities in health within 6 years. The reports that follow show that community-based participatory approaches can deliver substantial progress and impressive results. As we approach the midpoint in the decade that was to lead to the elimination of racial and ethnic disparities in health, the early results from the REACH 2010 communities indicate that we now know enough to urge the spread of efforts like these everywhere. Clearly there is more to come, but the evidence is too strong to wait for the final results. These community-based programs must be implemented and expanded to all affected communities. The health status of our nation depends on it!!

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