

Communicating Cancer Control Information to
Hispanic Migrant Farmworkers:
The Role of Environmental and Social Network Support

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Abstract

A formative analysis of the environmental and social network contributors to south Georgia's Hispanic migrant farmworkers' skin cancer control behaviors was undertaken. Two national health standards relating to skin cancer control for migrant farmworkers are identified, together with a discussion of the domestic laws which exist to support these standards. An analysis of institutions and the current administration's goals in relation to implementing the domestic laws demonstrates the distance that may exist between a law and its enforcement. The rights to govern afforded State and local governments also illustrate the vast web of influence enacted by environmental factors, particularly in relation to institutions designed to support health policy. Finally, the role of cultural norms in allocating legal responsibility within a community, as well as social support within a cultural or subcultural group is considered. In conclusion, the analysis facilitates the identification of a broad purview of intervention objectives and audiences.

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A number of States have begun to plan cancer control campaigns for agricultural workers, with several of these projects specifically addressing the needs of migrant farmworkers, who are "predominately young married Hispanic men with families" (GAO/HRD92-46, 1992, p. 8). Previous explanations for the dearth of research relating to agricultural workers' health include the public's lack of information and concern, rural health's neglect of this group, agricultural workers' tendencies to take both blame and responsibility for what happens to them, farming representatives' failure to address health issues, federal and/or state agencies lack of involvement, and academia's absence in this realm (Merchant, Kross, Donham, & Pratt, 1988). All of these apply to Hispanic migrant farmworkers as a subpopulation of agricultural workers: plus, Hispanic migrant farmworkers face political, legal, and social disfranchisement as well. This essay examines the role of both environmental and social network support on Georgia's Hispanic migrant farmworkers' health behaviors in relation to skin cancer prevention and detection. Environmental support includes the "multiple environmental encouragements of high-risk behaviors" (Brownell & Shumaker, 1985, p. 114) and addresses the contribution of societal institutions to one's behavior (Bruhn & Phillips, 1984). Social network support more directly examines the influence of groups and individuals with whom one affiliates (Bruhn & Phillips, 1984; Tardy, 1985). Using published scientific research and government reports, organizational documents (e.g., informational brochures, booklets, and flyers), and field observations and interviews, five issues were evaluated:

- (1) to what degree there are clear statements of national standards applicable to migrant farmworkers' health and skin cancer control:
- (2) to what degree domestic laws have been created to observe these national

health standards:

(3) to what degree federal institutions and administrative goals support the domestic laws;

(4) to what degree state and local rules and actions exist to facilitate or inhibit the attainment of federal administrative goals and institutions: and

(5) to what degree cultural norms allocate legal responsibility and mobilize support for health policies and practices.

Such an analysis fulfills an ethical obligation, as explained by Parrott, Kahl, and Maibach (1995), providing a broader purview of agendas to consider in the design of health campaigns (see Dorfman & Wallack, 1993).

CANCER CONTROL AND AGRICULTURAL WORKERS

Cancer control is defined as the "reduction of cancer incidence, morbidity, and mortality thru an orderly sequence from research on interventions and their impact in defined populations to the broad systematic application of the research results" (Greenwald, 1984, p. 3). The planning, implementation, and evaluation of communication campaigns contributes to the ability to apply basic medical research findings about cancer toward the goal of controlling the disease (Butler & Paisley, 1977). Agricultural workers have been shown to be "at a four times greater risk of skin disease than workers in other industries" (Moses, 1989, p. 118). Although a review of published medical literature in migrant health between the years 1966-89 found no migrant-specific cancer-related articles (Rust, 1990), agricultural workers in general have been found to have an increased incidence of skin cancer (e.g., Blair, Maler, Cantor, Burmeister, & Wilklund, 1985; Blair & Zahm, 1991). Skin cancer demonstrates causal relationships both to exposure to the sun (e.g., Delzell & Grufferman, 1985) and pesticides (Moses, 1989). Chronic ultraviolet (UV) radiation exposure is particularly likely to occur in outdoor workers, such as farmers (Olsen & Jensen, 1987), and in the South where the hot weather occurs for more days of the year and with greater intensity. Essentially every study of non-melanoma skin cancer

death in farmers has found farmers to have an elevated relative risk (Blair et al., 1985). In a study of North Carolina farmers--the closest geographically located group to Georgia to be documented--the mortality ratio was 1.8 (Delzell & Grufferman, 1985). Subsequent studies have shown elevated lip cancer rates for farmers, some due to UV exposure (Blair, Zahm, Pearce, Heineman, & Fraumeni, 1992; Fincham, Hanson & Berkel, 1992). Despite the commonly held attitude that individuals with darker skin pigments need not worry about exposure to the sun and skin cancer, epidemiological research supports the conclusion that everyone is at risk for skin cancer, regardless of skin color (Gibbons, 1992). Moreover, seasonal outdoor work has been consistently associated with increased risk for skin cancer (Elwood, Whitehead, Davison, Stewart, & Galt, 1990), while men and women with darker skin or who tan are least likely to use skin protection measures (Campbell & Birdsell, 1994). The latter suggests that while Hispanic farmworkers are at risk owing to their seasonal harvesting of crops, they are doubly at risk due to a reduced likelihood of practicing behaviors to reduce risk.

In addition to UV exposure as a contributing factor to agricultural workers' skin disease, pesticide exposure poses a significant risk. Pesticides refer to the use of insecticides, rodenticides, fungicides, herbicides, fumigants, defoliant, molluscicides, nematocides, algicides, and acaricides, with 1.2 billion pounds of pesticides being used in the U.S. each year (Cordes & Rea, 1988). The primary way for workers to be exposed to pesticides occurs by "the skin, and not, as commonly believed, the respiratory system... Persistence of pesticides on the skin for many months after the last exposure has been shown" (Moses, 1989, p. 116). Taking as one example, farmers' use of arsenic is associated with:

a pattern of skin abnormalities including the appearance of dark and light spots on the skin, and small 'corns' on the palms, soles, and trunk...some of the corns may ultimately progress to skin cancer. (Arsenic, ATSDR, March 1989, p. 1)

All agricultural workers face increased likelihood of being exposed to factors highly

correlated with the development of skin diseases when compared to other occupations. Hispanic migrant farmworkers, however, must overcome additional barriers posed by language and social factors in order to receive information to safeguard against exposure and health care once exposure occurs.

Georgia Migrant Farmworkers and Skin Cancer Control

Georgia farmers received \$4.1 billion for their farm products in 1989, a record twice that received 15 years earlier (Miller & Givan, 1991). In States in the southern United States, such as Georgia, the number of available local resident hand laborers continues to demonstrate a decline while the size of farms increases (Dever, 1991). In the absence of local workers, the need for hand harvesters has generated an influx of migrant farmworkers to these States. The range of estimates of the size of the nation's migrant farmworker subpopulation of agricultural laborers varies from one to four million, with some reports including the dependents of migrants and other reports including migrants who are undocumented aliens (GAO/HRD92-46, 1992, p. 8). Georgia has approximately 100,000 migrant and seasonal farmworkers performing agricultural work, with approximately 30% of these constituting migrant laborers of Hispanic origin; this compares with 28,000 total migrant and seasonal farmworkers just over a decade ago (State Office of Rural Health, 30 September 1993, p. 8).

Beyond the sheer numbers, the work that these migrant laborers do--harvesting by hand this nation's food--should cause Americans to pause and reflect about the behavioral options that hand harvesters face in the absence of toilet and water facilities in the field. "The lack of toilet facilities is a serious hazard not only to the farmworker but also to the consumer. Workers who must evacuate in bushes or open fields may contaminate edible food" (Jasso & Mazorra, 1984, p. 91). In support of a self-benefit perspective for Americans in relation to safeguarding the health and well-being of workers hired to perform the stoop labor associated with harvesting hand crops, one might ask oneself, for example, just how much fecal matter on a strawberry plant is acceptable. Foremost, to

frame campaigners' efforts to promote cancer prevention and detection to south Georgia migrant farmworkers requires an evaluation of the national health standards applicable to enabling health in this regard.

National Health Standards

An examination of a nation's general health standards provides the parameters within which to consider health promotion efforts aimed at reducing Hispanic migrant farmworkers' risk for cancer. The United States assumes a position of leadership in the world with regard to efforts to safeguard human rights, including the right to live and work in an environment that poses no direct threat to health and well-being (vonGlahn, 1981). In particular, two national standards bear significantly on human health and the communication of skin cancer control information to Hispanic migrant farmworkers in Georgia. On the one hand, the United States assumes an obligation to safeguard the air that residents breathe and the water they drink, with air pollution having direct implications for ozone depletion, ultraviolet (UV) rays' intensity, and--therefore--UV contact with human skin (Monastersky, 1991). On the other hand, this nation's citizens expect the food supply to be safe and pest free, an expectation associated with pesticide production and use (Rowley, 1990).

In aiming to satisfy both of the aforementioned standards, a conflict occurs, as use of some chemicals, and by extension, some forms of pesticides threatens the quality of the air (and/or water) we use--and human life, while promoting the quality of the food we consume--and human life (Citizen's Guide to Pesticides, 1987). Pesticide application, as previously noted, may cause personal health harm to applicators, particularly in the absence of adequate water and facilities to wash with after pesticide application (Citizen's Guide). The implications of the outcomes associated with these two competing national health standards are particularly acute for migrant farmworkers in relation to health. One study of the top 10 diagnoses in migrant health clinics for the years of 1986-87 found that among 6,969 patients, 2,596 of whom were male, contact dermatitis was the primary

reason for seeking care for males ages 20-29 and second only to hypertension for males 30-44 (Dever, 1991, p. 11). These might well be symptoms that foretell a future in which workers face not only increased risk for skin cancer, but other cancers as well, due to pesticide absorption through the skin and then by other organs.

Conflicts such as the one identified must be addressed by health campaigners as part of the efforts to communicate cancer control information to migrant farmworkers, enlarging such communication campaigns in terms of the audiences and messages designed to support farmworkers' protective practices. To arbitrate such conflicts, a review of domestic laws which exist to support the national health standards provides one means to assess which audiences should be included in these efforts.

Domestic Laws in Support of the National Standards

National health standards are broad guidelines which articulate the direction of health-related activities to be undertaken within the nation. For every standard, multiple domestic laws are necessary to evolve the principle toward practice. With regard to promoting the health and well-being of migrant farmworkers, the United States General Accounting Office published a report in February, 1992 to respond to a "request for information on the extent to which federal laws, regulations, and programs protect the health and well-being of the nation's hired farmworkers" (Delfico, 1992, p. 2). To summarize this report,

Laws and regulations that cover workers in all industries include those that protect workers from harmful pesticides, other toxic substances and unsanitary work conditions, as well as those that safeguard children from abusive labor practices (Delfico, p. 2).

In particular, three domestic laws which bear on the outcomes associated with specifying policy in relation to American farming and health standards affecting migrant laborers' skin cancer risk were identified:

- (1) the Migrant Health Act of 1962:

(2) the Occupational Safety and Health Act of 1970; and

(3) the Immigration and Reform Act of 1986.

These are deemed most relevant for this evaluation, as they prescribe what should be done to safeguard migrant farmworkers and, at the same time, what allows the neglect of these prescriptions.

The Migrant Health Act addresses the needs for primary care that migrant and seasonal farmworkers and their families face. Its enactment in 1962 provided the means to promote comprehensive care for these laborers (see Bureau of Primary Health Care: Facts and Figures, May 1993). The Act makes resources available on a competitive basis to States who may receive grants to operate migrant health centers and programs. Thus, by this law, individual States may become eligible to be funded to promote the attainment of goals in relation to satisfying the competing demands of migrant farmworkers' health and safety versus crop production and pest free food.

In addition to the Migrant Health Act, the Occupational Safety and Health Act of 1970 bears directly on outcomes associated with efforts to communicate skin cancer control information to South Georgia migrant farmworkers. This 1970 Act requires that agricultural employers who hire more than 10 farmworkers must provide drinking water, handwashing facilities, and toilets for those workers; 10 or fewer are exempt (GAO/HRD92-46, 1992, p. 19). It provides the legal precedent to mandate the presence of facilities to wash after exposure to pesticides and to reduce the dehydration associated with sun exposure. What this effectively means, however, is that many hired farmworkers still remain unprotected by federal regulations for field sanitation, since farms that employ 10 workers or less are exempt. The Department of Labor's 1990 national survey of migrant farmworkers showed that 31% work in fields without drinking water, handwashing facilities, or toilets--a finding which better illustrates the number of employers who do not come under the mandate of the 1970 Act rather than the number of employers violating the law (GAO/HRD92-46, p. 4).

Without the availability of safe water for drinking and washing, sun and pesticide exposure effects are intensified. Extending these outcomes to the contamination of workers' clothing, the lack of facilities to adequately wash clothing exposed to pesticides, and insufficient funds to replace such clothing increases the harm associated with exposure. From another point-of-view, the benefit associated with providing adequate drinking and washing facilities extend to the employers who will lose fewer worker hours to heat prostration and visits to health care providers for contact dermatitis. Inadequate facilities, in other words, is likely to increase migrant farmworkers' need for health care, which elevates the financial resources required to care for these laborers, who would require fewer diagnoses and less treatment if they were safeguarded from exposure in the first place.

Thus, a broad domestic law exists to provide the opportunity for States to develop health programs for migrants. Another law aims to garner protection for the majority of migrant farmworkers in relation to pesticide exposure. Yet a third domestic law--designed to clarify the status of aliens--is viewed by some as providing a large loophole for agricultural employers in regard to both hiring and protecting undocumented workers. The Immigration and Reform Act of 1986 governs the Systematic Alien Verification for Entitlements (SAVE) process, which is required for six federal benefit programs, including Medicaid--a primary payment source for health care for migrant farmworkers (Guide to Alien Eligibility for Federal Programs, 1990, p. 66). Undocumented aliens are ineligible for Medicaid and other governmentally funded programs. At the same time, after a half dozen years of existence, some observers conclude that agriculture is "the only sector of the U.S. economy to be given preferential treatment in the Immigration Reform and Control Act (IRCA) of 1986" (Thompson & Martin, 1991, p. 527). Hundreds--even thousands--of undocumented aliens work the farms doing the hand labor that no one else appears willing to do. They are allowed to enter the U.S. and remain to do the work but with little or no legal protection for their health and well-being (Monahan, 1994). As a

result, "migrant farmworkers, as the largest sub-class of sweated workers in the United States today, are caught in the same web of exploitation that Congress pilloried a century ago" (Linder, 1990, p. 213).

Migrant and seasonal farmworkers reside in very poor conditions and often have ill health with no one enforcing labor protection laws on their behalf (Linder, 1990). To enforce laws on behalf of migrant farmworkers, however, jeopardizes the profit margin of farmers, which is already a narrow one in the frequently poor agricultural economy of the past decade. In other words, to protect the health of one group puts at risk the work and living of another group (Rowley, 1990). To enact domestic laws which benefit migrant farmworkers' health to the detriment of farmers' subsistence likely dooms campaigners' efforts. On the other hand, to design campaign messages which promote such practices as handwashing after pesticide use or exposure to migrant farmworkers without the force of domestic laws in place to support such promotion will also fail. What becomes evident is that the major weakness of domestic laws aimed at supporting national health standards is in the area of implementation, particularly when enforcing domestic laws to uphold health threatens the economy of a group or the nation. Threats to physical well-being often seem to be distant, unseen, long-term issues, affecting only a few people. Threats to economic status are immediate, visible, short-term concerns, seeming to impact many persons. As a result, nations may too frequently be shortsighted in their decision-making.

Even the discernment that a national health standard is supported by appropriate domestic laws is insufficient evidence, however, to claim that individuals have been empowered in relation to their health. Further evaluation is necessary to determine whether institutions exist to facilitate law enforcement, as well as whether or not the administration's goals support activities in a prescribed arena.

Institutions and Administrative Goals

The design and passage of domestic laws in support of national health standards is a necessary but not sufficient condition to promote individuals' health and well-being. At

any given point in time, a particular administration's goals have a substantial impact on whether or not institutions, particularly federally funded institutions, exist or have adequate financial and political support to uphold the laws designed to enforce a national health standard. Indeed, the basic purpose of national health care policy and reform is to provide leadership and direction for efforts to improve the health and well-being of a nation's citizens. This includes the design and implementation of the means to grant access, both geographically and financially, to health and medical care (Steiner, 1991).

In support of the Migrant Health Act, Congress established the Migrant Health Program, which operates a number of rural migrant health centers across the country (GAO/HRD92-46, 1992, p. 25). In 1992, the Migrant Health Program served approximately 535,000 migrant and seasonal farmworkers nationwide, with half of these being Hispanic laborers (BPHC Migrant Health Program, May 1993). Cooperative agreements with State agencies and/or State and Regional Primary Care Associations complement Migrant Health Center efforts by coordinating both federal and state primary care resources. In Georgia, the absence of a regional migrant health center forces reliance on agreements with State agencies to facilitate the implementation of the the Migrant Health Act. Georgia's Migrant Health Program involves only 10% of 159 counties, using the existing public health care system to provide access to primary health care for migrant farmworkers. Services are delivered by the public health staff in county public health departments, using contract providers who are reimbursed by a voucher system.

Since migrants do not stay in one place for long, the National Migrant Clinicians Network is working on a system to track migrant health using a "smart-card" for workers to take with them. The card's magnetic strip contains information to be read by a computer. Unfortunately, workers fear registering their names, sometimes due to illegal status, but more often just due to the sense that by putting their names on a list to register makes them traceable, so that they may be sent back to their countries of origin (Stewart, 1993). Beyond the agencies and providers aligned with providing care to migrant

farmworkers who have need, two federal institutions are associated with efforts to safeguard migrant farmworkers' health in relation to pesticide exposure, and so affect skin cancer control efforts. These are the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA). One of OSHA's standards specifically redresses risks associated with pesticide exposure, requiring employers in agriculture to provide employees with information and training on chemical hazards, including pesticides (GAO/HRD92-46, p. 4). However, owing to modified EPA standards, OSHA has deferred to the EPA and is not enforcing its standard, despite findings that each year, up to 300,000 acute illnesses and injuries of hired farmworkers are due to pesticide exposure (p. 3-4). The EPA revised the Worker Protection Standard for pesticides in August 1992 to require that agricultural workers be given training in pesticide safety. Nonetheless,

Many hired farmworkers are given insufficient information about the hazardous chemicals to which they are exposed. They generally do not have access to the product label for a given pesticide. EPA requires that every pesticide product bear a label containing the product's brand name and active ingredients, warnings and precautionary statements concerning the pesticide's toxicity and effect on skin and eyes, first-aid procedures, and other information. (GAO/HRD92-46, 1992, p. 14)

Although EPA requires warnings, they have no mandate that these warnings be in Spanish, so even if workers have access to the labels--which is infrequently--they would most probably not understand them. In one survey of 460 hired farmworkers in Washington, 89 percent did not know the name of a single pesticide they had been exposed to, while 76 percent had received no information on measures for protection (Mentzer & Villalba, 1988). This is being addressed through such efforts as the development of an EPA guide for agricultural workers on protecting themselves from pesticides (U.S. Government Printing Office, July 1993). Based on the findings of interviews and focus group discussions with migrant farmworkers about the draft

document, a number of changes were made to increase the likelihood for success of the guide (Leahy, 1994). These discussions pinpointed the need to avoid using English words in the visual presentations. For example, the decision was made to use a hand gesture to represent the word, "No," rather than using the word itself, and to avoid the use of the word "yes!" Also, the need to be consistent in visual depictions of workers dressed in the ways being promoted, including a wide-brimmed hat, was observed. The current document provides one resource to communicate information to south Georgia's Hispanic migrant farmworkers, with use providing one means to evaluate the guide's effectiveness.

Beyond the existence of federal institutions to support domestic laws, the current federal administration's policy and practices aimed at achieving particular goals affect the outcomes associated with efforts to enforce laws. With regard to the current administration's goals, the Clinton health plan, for example, posed adverse consequences for migrant farmworkers in at least three ways, as summarized by the National Association of Community Health Centers, Inc. (see Migrant Clinicians Network Clinical Supplement, 1994, p. 2). First, the plan excluded undocumented aliens, which--again--leaves many migrant farmworkers with few to no options for care. This forces such workers to postpone seeking care in the first place and then to rely on emergency rooms--resulting in higher costs not only because emergency room care costs more but because the migrant workers put off seeking care until more advanced illness absolutely demands it. Second, the initial health plan limited an enrolled person's coverage to six months out-of-area coverage and then only covered emergency care rather than the full range of benefits. Many migrant farmworkers are away from a home base area for longer than six months at a time, and often need comprehensive primary care services (Supplement, p. 2).

A third way that the Clinton health plan would have affected migrant farmworkers was a multifaceted one, in as much as it stipulated that: (a) seasonal workers pay both employee and employer share of a premium; (b) low income persons get a premium subsidy; (c) hard-to-reach populations' payment rate adjustments are federally

standardized: and (d) categorical programs serving these populations are phased out, while phasing in payments to local providers to begin services (Supplement, p. 2. 4). The subsidies offered are based on the lowest-cost care plan available in an area. The rate adjustments for hard-to-reach populations, such as migrant farmworkers, have long been proposed as a method to equalize access to care, but lead to long delays in eligibility, as well as frequent failure to correctly apply adjustment factors. With regard to phasing out some programs, the utmost concern relates to what the implications might be for federal funding of migrant health programs and the regional centers and State clinics operating within this system. Whatever happens on the federal level in regard to these matters will affect and be affected by State and local activities.

State and Local Rules and Actions

State and local ordinances and actions to support federal institutions and administrative goals contribute to empowering individuals to be healthy. In the presence of federal institutions and goals aimed at a particular health objective, the State and local responsibility falls within the domain of enforcement. State and local authorities, however, may either use the force of domestic law and the support of federal institutions and administrative goals to act, or choose to ignore them. In the absence of federal institutions and administrative support for a particular health objective, State ordinances and local rules and actions may substitute for lack of federal action, prompting, at the grassroots level, legislative activities which may go from the local to the State to the federal level.

At the State level.

Georgia is one of 14 states nationwide that permit agricultural employers to voluntarily participate in Workers' Compensation, which provides medical and disability coverage for work-related injuries...most ...do not participate in the program. (Epstein, 1994, May 5, p. 5B)

This means that little support for employers to financially redress migrant farmworkers'

claims exists at the State level. Employers have nothing to gain by creating unsafe working conditions which harm workers and take time from the job. They also have no incentive, however, to demonstrate concern for workers' health and well-being-- particularly in the long term.

The absence of Workmen's Compensation leaves migrant farmworkers with few health options or choices. To legally pursue any health harm, Georgia's migrant farmworkers' may seek assistance from the migrant farmworkers' division of Georgia Legal Services Program has been in existence since 1978, operating with federal monies from a grant and some private monies. The goal of the program is to assist migrant farmworkers with labor and employment issues. Fully staffed, however, the program only includes three attorney and four paralegals to address the legal claims of some 100,000 workers and their families. The Director of the Program, Michael Monahan, asserts that,

...skin cancer is...an issue too. Being out in the fields all day long and protective clothing and exposure to pesticides, that's a concern for us--it's not a concern for the workers. We haven't educated them enough in that regard. But that's a very serious issue. (Monahan, 1994, p. 8)

Even in the presence of a State program, lack of staff and the Legal Aid office's location in Tifton, Georgia, make access to legal services difficult, if not impossible, for most migrant farmworkers. Despite the existence of such a program, therefore, few farmworkers are likely to have representation.

Beyond the legal recourse available at the State level in relation to health standards and migrant farmworkers, the Georgia Migrant Health Program offers another opportunity to promote education and awareness about skin cancer prevention and detection among migrant farmworkers. In 1992, the Georgia Migrant Health Program served 3,517 migrant and seasonal farmworkers in the 16 [of 159] counties served through the network of delivery by health departments (Dixon, 1993, p. 1). Recalling that estimates of the number of migrant farmworkers approaches 100,000 in this State, this number means that

Georgia served less than four percent of the group. Without adequate funding to provide services targeted to migrant farmworkers throughout the State, workers may turn to area providers, who--ideally--will be reimbursed by Medicaid for providing these services.

Many if not most rural physicians in Georgia, however, do not accept new Medicaid patients (Dixon, 1993, p. 2). Moreover, many migrant farmworkers do not qualify for Medicaid because, as noted earlier, they are undocumented aliens. Even those who do qualify still face the barriers of State enrollment procedures, including a waiting period of 45 days, and other administrative requirements (GAO/HRD92-46, 1992, p. 24).

In comparison to Georgia, the State of Washington signed into law on May 17, 1993, the Health Services Act, as a means to provide universal access to health care (see Healthy Options, April 1994). This occurs through a variety of approaches, which include the requirement that employers pay at least half of the cost of health insurance premiums for employees and their families, with the contribution being based on the number of months an employee actually works. The State of Washington's legislature specifically directed the Commission to develop a way to include seasonal workers and their employers in the reform effort. This is an example of a State acting on behalf of workers' health, even in the absence of domestic law, federal institutions, or administrative goals aligned with them.

At the State and local level in Georgia, much of the focus is on identifying barriers to migrant farmworkers' receipt of health care--in any case, not just due to sun or pesticide exposure. The three main barriers identified in a health survey of 375 migrants conducted in two Georgia counties were cost (54.2%), inability to effectively communicate (16.7%), and access in terms of availability of providers (14.3%) [Dever & Adams, 1992]. Also implicated in delivery of care to migrant farmworkers is provider insensitivity to culturally diverse patient needs and institutional inflexibility in caring for patients (Jezewski, 1990). To redress these criticisms necessitates that the cultural norms which allocate legal responsibility in relation to migrant farmworkers' pesticide use and exposure to UV, and

social network support for protecting against such harm also be examined.

Allocating Legal Responsibility and Support

Many kinds of social networks may affect one's health and well-being (Baranowski, Nader, Dunn, & Vanderpool, 1982; Greene & Monahan, 1984). Among the groups found to influence individuals' health behaviors are: (a) emotional support groups, which are usually comprised of just a few intimates; (b) the social support network, commonly made up of people whom one calls on for a variety of needs, with reciprocity usually inherent in such requests; and (c) the global network which consists of people whom provide an individual with information (Bernard, Johnsen, Killworth, McCarty, Shelley, & Robinson, 1990). Perhaps the greatest barrier to overcome in communicating cancer information to south Georgia migrant farmworkers is the limited social support for giving aid to migrants, as expressed by one writer in a letter to the editor of Time magazine:

I suggest that the politicians in Washington wake up to the fact that American taxpayers are sick and tired of being told we have to support illegal immigrants...Many of us are having trouble making ends meet, yet we are forced to watch as our hard-earned money is handed out to these illegals via free medical care, welfare and education. (Hove, 1993, 7)

State and even local ordinances and actions will have little impact without the force of a community's support behind them. When the cultural norms of a community fail to support a State ordinance which limits tobacco purchases to individuals over the age of 18, for example, young adolescents are more likely to be able to purchase cigarettes out of vending machines or at local convenience stores, while people look the other way. On the other hand, when the legal drinking age is 18, but a community deems itself to be "dry," even persons 18 and over will have to go beyond the community's borders to purchase alcohol.

Most of us can recall at least one situation in which a wrong was clearly

committed, but in the absence of social support to allocate legal responsibility, little could be done. These situations may involve child or wife abuse, drunk driving, and even the use of so called "recreational" drugs such as marijuana. Whatever laws may be on the books, ultimately, the people who make up a community allocate legal responsibility. So it is, too, in the case of migrant farmworkers' exposure to UV and pesticides, and the provision of health care and information to prevent harm. Rural cultural norms bear sharply on the process and outcomes associated with efforts to communicate skin cancer control information to migrant farmworkers. Most south Georgia migrant farmworkers live and work in the midst of rural communities, and:

The rural value system reflects rural culture. Rural residents tend to be more morally and politically conservative, traditionalist, and work-oriented. Rural people tend to place more confidence in local versus larger institutions; value self-sufficiency, individualism religiosity; and be more community- and family-oriented than urban people. (Long, 1993, p. 133)

As a result, many rural residents adopt an exclusionary attitude about migrant farmworkers.

In view of the obvious differences in background between the local rural residents of south Georgia and Hispanic migrant farmworkers--country of origin and language, for example--the social distance constructed between these two groups is not too surprising. The description of rural culture, however, has much in common with observations of the Hispanic culture. For Hispanics, family is the dominant source of advice and help in all generations, consistent with the familistic orientation of Mexican American culture; friends and other nonrelatives appear to be significant though secondary to family when it comes to advice on personal problems in middle and younger generations (Markides, Boldt & Ray, 1986). With regard to the United States health care system, the concept of "personalismo," or general trust of people versus distrust of institutions, significantly affects these interactions: Hispanic patients are more likely to respond to flexible, easily

accessible caregivers who minimize the impact of a bureaucratic system (Schaefer, 1984). Hispanics also hold a fatalistic outlook on life leading to passivity about treatment (Schaefer, 1984). Compare this to one study of 62 rural residents which found that they defined health as the ability to work, placing little to no emphasis on freedom from pain--demonstrating a similarly passive attitude toward much health care (Weinert & Long, 1987).

Despite the similarities in fundamental values shared between rural community residents and Hispanic migrant farmworkers.

Often individuals in rural communities fail to recognize the contributions that migrants make to the economy and the community, and sometimes view them as taking scarce resources and services away from the general population. (Dixon, 1993, p. 12)

The failure of rural residents to recognize similarities and to emphasize differences sharpens migrant farmworkers' isolation from the local community:

...migrant health center staffs...yielded the following typical picture: a migrant family arrives at a new site and finds employment and housing on or near a farm with a few other migrants--the large migrant labor camp is the exception. There is no ongoing social network to provide emotional, social, or financial support. The husband leaves at dawn to work in the fields, leaving his family with no transportation to use for schools, shopping, or doctors' visits. The wife speaks no English and may be illiterate in Spanish. She may be fearful as well as depressed about her isolation. Access to health care is difficult at best. (Meister, 1991, pp. 504-5)

Thus, Georgia's migrant farmworkers have little emotional or social support from their social networks in relation to health and medical care generally, let alone in regard to skin protection specifically. Hispanic women are most often responsible for taking care of the family, managing the household, and serving as "broker between the family and the rest of

the community" (Casas, Wagenheim, Banchemo, & Mendoza-Romero, 1995, p. 239).

Employers could help to fill the gap, but farmers have been found to even limit their social support for other farm neighbors facing the loss of their farms; farmers often blame the victims and withhold exchanges due to fear of their neighbors' neediness or emotionality (Wright & Rosenblatt, 1987).

An examination of migrant farmworkers' global networks in relation to health and medical care reveals that those most closely aligned with the responsibility for fulfilling the promises of the Georgia Legal Services Program and the Migrant Health Program are outreach workers and public health nurses--both of whom may act as advocates for migrant farmworkers' health (Bulechek, McCloskey, & Aydelotte, 1985).

Spanish-speaking outreach workers have the responsibility for facilitating migrant farmworkers' access to health care by visiting migrants in the labor camps, enrolling them in Georgia's Migrant Health Program, providing transportation to area clinics, and acting as interpreters within the health care system. There are, however, only eight outreach workers performing this function for 16 counties and being paid a modest salary. As one of the outreach workers acknowledged, they, too, are uninformed and unconcerned about skin cancer control, viewing farmworkers as having so many other health problems and failing to see this as an opportunity to prevent some of those problems (Fernandez, 1994). Thus, this global network source provides little information about protection from pesticides and the sun for farmworkers.

Once migrant farmworkers have been enrolled in the Georgia Migrant Health Program and arrive at a clinic, public health nurses provide their care, becoming yet another global source for health information. Immigrants have been found to regard nurses as the best source to do health teaching (DeSantis & Thomas, 1992). Nurses can, however, create barriers in the health care system by not understanding or accepting Hispanic culture's treatment of health (Torres, 1993). Research that examines community health nursing in rural counties consistently identifies isolation, scarcity of resources,

variation of practice, and lack of anonymity as factors directly affecting the rural community health nurse (Davis & Drees, 1993). Moreover,

Given the many needs of the non-migrant, year-round population and the extent of poverty in these areas, the health of migrants is not the highest priority for public health. (Dixon, 1993, p. 12).

One exemplary program with implications for communicating cancer control to south Georgia migrant farmworkers has been initiated in a rural community bordering Washington D.C., where rural nurses undertook to expose merchants, farmers, farmworkers, and applicators to the dangers of pesticide exposure (Lassiter, 1992). Five principles guiding that effort have pragmatic implications for planning similar efforts in Georgia:

- (a) seek citizen participation and partnership in the planning;
 - (b) focus on local concerns as part of the outcome objectives;
 - (c) use citizen groups to implement the process;
 - (d) implement a program suitable for the local resident; and
 - (e) address process outcomes along the way to achieving the project's goals
- (Lassiter, 1992).

These tenets emphasize the need for global networks to create and maintain relationships with other local community groups, affording opportunities to provide social support for information disseminated by the global networkers. This information, in turn, should directly relate to the environmental factors identified as bearing on efforts to communicate cancer control information to migrant farmworkers.

CONCLUSION

Efforts to communicate health information occur in policy and administrative environments which significantly impact the response of the primary audiences for whom particular health information is designed. These primary audiences include individuals isolated from the health care system owing to rural living conditions, inadequate numbers

of providers, and financial and educational impoverishment. Many of these groups are citizens who have political, legal, and social representation within the United States' system. Still others, however, have little to no political, legal, or social representation with the United States' system. Among the latter are Hispanic migrant farmworkers, including those who travel to south Georgia to plant and harvest numerous crops, including cabbage, peppers, zucchini, tomatoes, strawberries, and tobacco.

Health message designers frequently enter campaigns with the assumption that the appropriate starting place for their efforts is to change individual behavior. This is, however, by no means the best starting place, nor the one which is most likely to enable Hispanic migrant farmworkers to be healthy, a finding consistent with previous research which seeks to understand Hispanics' drug use (Felix-Ortiz & Newcomb, 1992), smoking (Marin, Perez-Stable, Marin, Sabogal, & Ostero-Sabogal, 1990), and willingness to provide AIDS prevention advice (Marin, Marin, & Juarez, 1990). As suggested throughout this discussion, promoting individual responsibility in relation to health is a hollow activity in the absence of actions to support the promises, and rules to attain admittance to institutions which implement the intent of domestic laws designed to fulfill the aims of national health standards.

As a result of this analysis, six interrelated intervention agendas have been identified to span a range of activities to be associated with efforts to promote cancer control to south Georgia's Hispanic migrant farmworkers. At the broadest level, across all these audiences and the general public, a universal needs exists to increase the general public's awareness of the contributions that Hispanic migrant farmworkers make to the both the nation's economy and food supply. The benefits to be gained through promoting the health and welfare of Hispanic migrant farmworkers should be publicly discussed and include an analysis of the quality of the crops being harvested by hand. The costs associated with failing to communicate safe pesticide use and sun exposure could be itemized in a precise economic fashion.

Numbers of Hispanic farmworkers seeking treatment in emergency rooms due to unsafe pesticide exposure and use, the cost of seeking treatment--both in terms of work lost for the employers and emergency room bills paid for by tax dollars--might be itemized. Then, perhaps the general public could be informed about these matters and reminded of them in very direct and reinforcing ways, with--for example--posters at the supermarket by the produce section telling where their food dollar goes. Beyond these universal elements of a campaign to garner environmental and social network support for communicating cancer control information to Georgia's Hispanic migrant farmworkers, specific aims arise in association with a number of varied audiences.

Georgia's National and State Congressional Representatives

The elected representatives of Georgia, both to the State and national Congresses, need to be informed about the ongoing activities of OSHA and EPA in regard to pesticide protection. "Fact Sheets" with vital statistics in this regard could be developed, including research citations for any claims. Moreover, a copy of the Protect Yourself from Pesticides Guide for Agricultural Workers published by the EPA should be provided to each representative, with specific suggestions for disseminating and supplementing the content contained in the guide. The latter includes the need for a legal mandate that pesticide warning labels be in Spanish as well as English.

Beyond what campaigners and other interested parties might do to promote the interest of Georgia's elected representatives, informed voters generally and Hispanic voters specifically might ask for an accounting of what the officeholders have done. As one of the States in the nation who depends upon agriculture, Georgia--in turn--must depend upon its elected representatives to protect and promote this industry and the workers in it. Representatives could be asked to explain what they are doing in this regard, how they have gone about achieving their goals, and why a particular approach has been taken. If concern for using public resources to give care to undocumented aliens comprises a contentious issue, political debate should be initiated. These debates, in a nation founded

on principles associated with a strong work ethic together with freedom of speech, religion, and press, would at least give public exposure to personal hypocrisy. Moreover, such discussion provides a forum for farming representatives to present their side of this complex story.

Georgia's Farming Groups' Representatives

As observed in the opening paragraphs of this essay, farming representatives--such as Agricultural Extension Service and Farm Bureau--have too seldom brought farmers' agendas to the attention of the American public. To some large extent, this is probably due to the independent and private nature of farmworkers generally. They must come to realize, however, that the public's failure to understand the tensions created in the agricultural business by so many conditions out of farmers' control--including the weather and crop subsidies--only contributes to misperceptions. Beyond increasing the public's awareness and understanding of the frequently narrow profit margins that farmers operate on, agricultural representatives, such as cooperative extension agents, could do more to insure that farmers are made aware of advances in agricultural science which reduce the need for chemical pesticide use. Research is going on across the nation in regard to ways to combine and integrate the management of various crops in ways that promote natural or organic resistance to pests. Farming representatives could also disseminate copies of the EPA pesticide guide to farmers and seek farmers' input about other appropriate ways to share the information with Hispanic migrant farmworkers. Finally, farming groups' representatives could make a significant contribution to the images associated with migrant farmworkers. This is particularly the case in relation to how local community residents regard these workers.

Georgia's Rural Residents in Communities Employing Migrant Farmworkers

Language creates a barrier between Georgia's rural residents and Hispanic migrant farmworkers, but the more important impediment blocking positive relations between the two groups relates to the image that rural residents have of these workers. The similarities

between rural community residents and Hispanic migrant farmworkers, oddly enough, contribute to the maintenance of social distance between the two groups. A focus on families and religion by one group leads to the exclusion of the other group. Messages could convey the similarities relating to fundamental values. Moreover, rural residents could be informed about the economic contributions made to their economy by the Hispanic migrant workers. These efforts could contribute to participation by local residents on advisory boards for planning the development of communication strategies in relation to sun exposure and pesticide use, not only for the migrants but for local residents as well. These strategies will likely involve the State's public health system.

Georgia's Public Health Nurses

In recognition of the broad responsibilities associated with being a public health nurse in Georgia, the Georgia Migrant Health Program could consider whether the need exists for a transcultural nurse specialist to serve as an expert in relation to migrant farmworkers and their health (Bernal & Froman, 1993). Transcultural nursing is a formal area of study and practice devoted to comparative analysis of different cultural and subcultural views of care, health, and illness beliefs, values, and practices, with the knowledge being used to provide both culture specific and cultural universal nursing care (Leininger, 1984, p. 72). Five masters degree programs and four doctoral programs in the United States offer degrees in transcultural or multicultural nursing (Rooda, 1993). The addition of such an expert to the Georgia Migrant Health Program staff would grant an opportunity to facilitate, among other activities, public health nurses' communication of skin cancer control information to migrant farmworkers. This could occur by having the transcultural nurse--who would speak Spanish--visit migrant camps to answer questions about pesticide and sun exposure, make sure that printed materials and information given to migrants are understood, and by being nonjudgmentally respectful (Cousins, Rubovits, Dunn, Reeves, Ramirez, & Foreyt, 1992; Guendelman, 1983).

The significant role that public health nurses generally might play in promoting

particular health policies, including those relating to migrant farmworkers, has previously been recognized with some claiming that:

Cooperative action from a united nursing body is needed to influence policies that affect health. It would entail more willingness on the part of nursing organizations, with the full support of their members, to become more active politically in lobbying governments for more health promotive health policies. (Chalmers & Kristajanson, 1989, p. 572)

At a more basic level, public health nurses could guarantee that the outreach workers employed by the Georgia Migrant Health Program understand the serious ramifications associated with the health of agricultural workers in relation to diseases that may arise from pesticide exposure and overexposure to the sun.

Georgia Migrant Health Program Outreach Workers

The outreach workers whom facilitate enrollment of Hispanic migrant farmworkers and their families into health care programs are bilingual and afford a vital link to the outcomes to be associated with efforts to communicate skin cancer control information to migrant farmworkers. If the outreach workers do not understand the information being presented about pesticides, for example, migrants will probably not understand it either. Outreach workers could, therefore, provide a pilot audience for all materials and plans for activities to be aimed at the migrant farmworkers. The outreach workers could provide assistance in the developmental stages, as well, to help avoid problems similar to the ones encountered in the draft of the EPA's pesticide guide. The outreach workers also could prove vital in determining the best methods to disseminate particular information, including whether to use informational signs posted in the fields and at relief stations, to Georgia migrant farmworkers.

Georgia Migrant Farmworkers

The goal of reducing Hispanic migrant farmworkers' overexposure to the sun and unsafe use of pesticides requires that they receive messages to inform them in relation to

these matters. The workers, as previously observed, must have access to information that they understand presented in ways to which they are receptive. If this occurs via their global networks and is supported by both their social support networks--in terms of agricultural employers and local residents--and their emotional networks--in terms of family and other migrant farmworkers, the likelihood that individual behavior will conform will be enhanced. Additionally, the national health standards associated with the health of residents in this nation, both in terms of pest free food and clean air, if supported by consistent and clear domestic law in relation to pesticide use and worker protection, federal institutions to enforce these mandates, and State actions facilitating the enforcement, will be more than promises.

The final analysis will come, of course, in a public of contested and competing agendas and goals--not the least being national health care reform. The hope is that in communicating cancer control to south Georgia migrant farmworkers, the pitfalls of promoting behavior without the support of social networks might be avoided, and that the pratfalls of any absent environmental supports may be overcome.

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