

Social Marketing of Agricultural Safety and Health to Ageing and Limited Resource Farmers: What are the Implications?

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Abstract

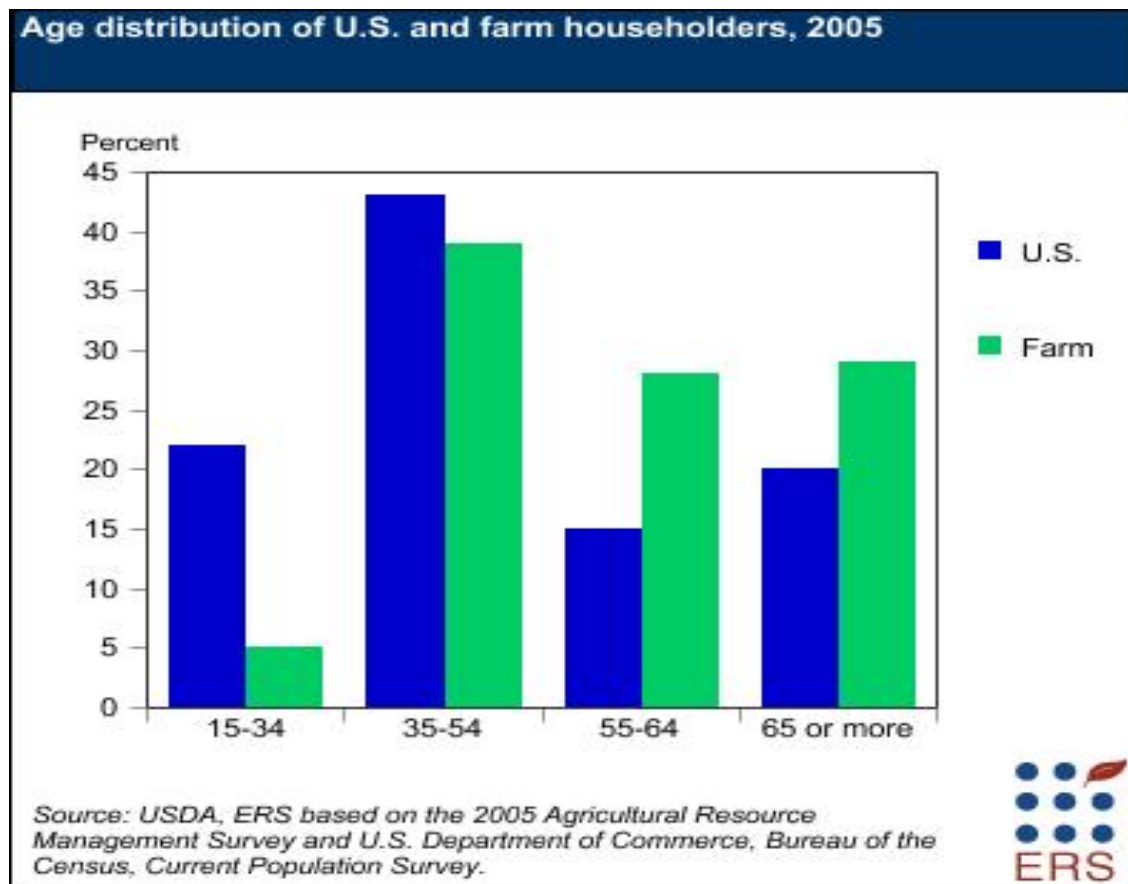
Understanding the demographics and psychographics, including beliefs, perceptions, values, norms, lifestyles and concerns of an agricultural population is one of the first and most important steps in assessing its health and safety needs. It is also a fundamental precursor to planning effective health/social marketing programs to prevent occupational injury and improve health among the population. This paper focuses on ageing and limited resource American farmers as a special population with unique health and safety needs that call for communication approaches targeted specifically at this population of farmers. The paper sketches the characteristics of this segment of farmers using extant data and information gleaned from various sources. It reviews various health education and communication approaches for promoting agricultural safety and injury prevention in the general farmer population. The paper also presents a discussion of the implications of engaging ageing and limited resource farmers in community-based participatory research and social marketing programs to improve their health and prevent serious agricultural injuries and death in the special population. Recommendations for the next steps in efforts to develop effective and targeted social marketing programs for ageing and limited resource farmers are then presented.

Introduction

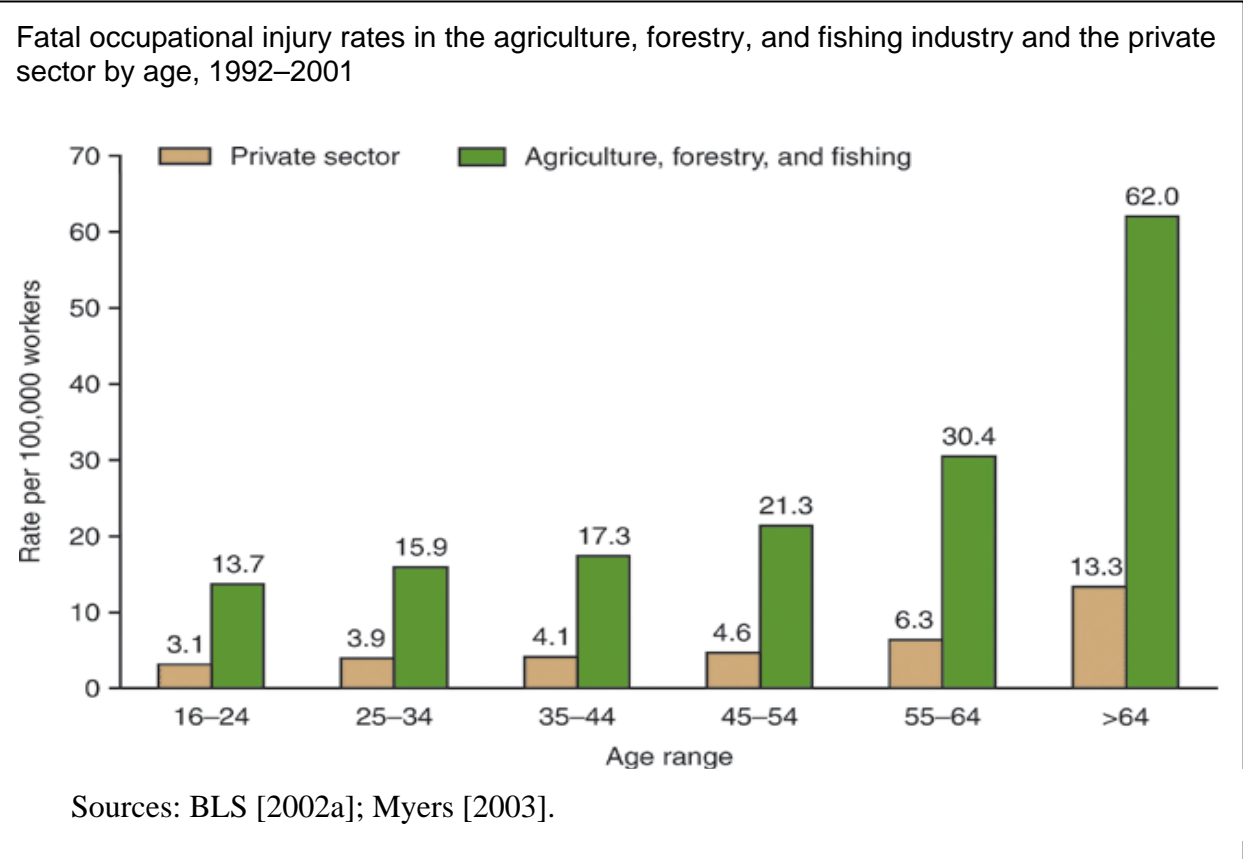
Ageing and limited resource American farmers are a special needs population that needs recognition and attention. However, they have been underrepresented within the research literature dealing with farm health and safety. Unlike the rest of the population,

farmers tend to remain in farming beyond the normal retirement age. It is not surprising to see farmers in their 70s still farming full-time (Hernandez-Peck, 2001).

Aged, or “senior” farmers, like most agricultural workers, are at risk of sustaining serious injuries. Senior farmers, however, may be at additional risk due to normal physical and sensory deficits associated with ageing (Whitman & Field, 1995). Conditions frequently associated with age (i.e., arthritis, limited vision and hearing, and depression) potentially make the demands of daily farming extremely dangerous for the older farmer (Hernandez-Peck, 2001). Other risks that increase older farmers’ susceptibility to injury include use of prescription drugs, sensory loss, loss in muscle and skeletal strength, slower reaction time, more rapid fatigue, reduced ability to handle such tasks as operating agricultural machinery under time stress, reliance on automatic rather than attentive behaviors due to the farmer having performed the task so many times in the past (Murphy, 1999; Dan Lago, 1999).



Thus, this paper argues that ageing and limited resource American farmers as a special population with unique health and safety needs that call for communication approaches targeted specifically at this population of farmers.



Psychographic Characteristics of Ageing and Limited Resource Farmers

A review of several published articles (Whitman & Field, 1994; 1995; Ambe & Murphy, 1993; 1995; Kramer et al., 1994; Purschwitz & Field, 1986) on ageing farmers’ attributes relating to personality, values, attitudes, interests, or lifestyles shows that these farmers enjoy their work. It gives them a sense of accomplishment and cannot be extricated from their heritage and culture, they are often unwilling to recognize or accept their physical limitations and they may be willing to acknowledge, for instance, that a risk of tractor-related injury exists, but believe the likelihood of an injury occurring to them personally is small.

The reviewed literature also show that older farmers tend to have a high level of confidence in their own abilities and often believe that they possess the ability to prevent

serious tractor and machinery-related injuries, for instance. They may not think there's anything new to learn, and have formed habits that are hard to break. Ageing farmers are often depicted as having fatalistic beliefs: all events are subject to fate or inevitable predetermination.

Some ageing farmers are also limited-resource farmers, who often belong to socially disadvantaged groups whose members have been subjected to racial or ethnic prejudice because of their identity as members of a group without regard to their individual qualities. Those groups include African Americans, American Indians or Alaskan natives, Hispanics, and Asians or Pacific Islanders. Women have also been added to the list of socially disadvantaged farm operators (USDA, 1997). Although this segment of the ageing farmer population faces greater risks than other ageing farmers and farmers in general, research studies focused on them are very scarce.

Need for Targeted Communication Interventions

A need exists for communication intervention efforts geared toward enhancing awareness of agricultural related hazards, fostering positive attitudes concerning injury prevention strategies, and encouraging safer work practices among older farmers and resource-poor farmers (Whitman & Field, 1995).

In his book titled *Looking Beneath the Surface of Agricultural Safety and Health*, Murphy (2003) details the long history of the *farm safety – risk paradox*. The paradox is that for nearly a century researchers have studied farming-related injuries and their prevention. The results of these studies have been distributed to farmers through large numbers of safety education programs. Typically these efforts have had little effect on lowering farm injury rates. It is not that farmers do not understand the safety research findings. Rather, it is that farmers and farm community members do not buy into the safety practices for a variety of reasons. These include long traditions of independent unregulated farm operation, as well as perceived economic and production costs associated with safety improvements such as placing ROPS on unguarded tractors. Additional barriers are present in the social norms of the communities in which farmers live and work. Social norms barriers are evident in local media and newspapers that report tractor injuries and fatalities as “acts of God” or “freak accidents.” Farm

community leaders and operators of farm service and agricultural businesses often share these attitudes or at least fail to take a stand on safety issues for fear of alienating farmers (Cole, 2002; Murphy 2003).

It is clear that translating farm safety research into information that is then disseminated to farmers has not been very effective in reducing farming-related injury rates. Agriculture continues to rank as one of the highest risk sectors for occupational fatalities in the United States (NAS, 2006). The problem is not that the information provided by researchers is irrelevant. In fact such information is important, but not sufficient. Changing farm safety practices requires changes in individual and community attitudes and values, as well as changes in knowledge and risk perception. Factual information about injury risks can be communicated by direct instructional methods, as can procedures and methods for working safely to reduce exposure to hazards and injury. However, attitudes and values cannot be taught by direct instruction. Telling people what their attitudes should be or what values they should adopt is usually ineffective or counterproductive. A more effective way to develop attitudes that support the adoption of safety practices is for researchers and members of the farming community to engage in dialogue, especially dialogue that includes narrative accounts and storytelling about farm injury events as experienced and discussed by members of the farm community (Cole, 1997, 2000; Morgan & Cole, 2002; Struttmann, Brandt, *et al.*, 2001; Murphy, 2003; Richardson, 2004).

From Selling to Marketing Agric. Health and Safety to Farmers

Approaches in the field of public health promotion and risk communication have evolved over the years from top-down dictation of rules and information (i.e. selling safety) to strategies that favor listening to and learning from the target audience, and building the program from there (i.e. marketing safety). Stakeholder participation in all phases of public health promotion and risk communication programs -- especially in interventions related to agricultural health, safety, and injury prevention -- ensures that such programs are culturally appropriate, relevant to stakeholders' needs, and focused on attitudes, barriers and motivators to behaviors perceived as important by the target audience.

Traditional health education defined as a continuing process of informing people how to achieve and maintain good health; of motivating them to do so; and of promoting environmental and lifestyle changes to facilitate their objective falls under the selling mode briefly described above. Health education efforts focus on presenting safety rules and guidelines to farmers without paying adequate attention to the contingencies that influence actual behavior of farmers (Cole, 2002).

Another method of selling safety to farmers is known as health communication. It is defined as the study and use of communication strategies to inform and influence individual and community decisions that enhance health. It links the domains of communication and health and is increasingly recognized as a necessary element of efforts to improve personal and public health (NCI, 1989; Piotrow, et al, 1997; Jackson & Duffy, 1998).

Social/Health Marketing and Community-based Participatory Research

While traditional health education and health communication focus on transmission of persuasive information to audiences, social or health marketing involves creating, communicating, and delivering health information and interventions using customer-centered and science-based strategies to protect and promote the health of diverse populations (CDC, 2005). It is a transdisciplinary practice that integrates traditional marketing field with public health research, health education and communication theories and practice. It promotes the use of marketing research to educate, motivate and inform the public on health messages. It is a complex framework that provides guidance for designing health interventions, campaigns, communications, and research projects. It comprises of a broad range of strategies and techniques that can be used to create synergy among public health research, communication messages and health behaviors.

Social marketing was "born" as a discipline in the 1970s, when Philip Kotler and Gerald Zaltman realized that the same marketing principles that were being used to sell products to consumers could be used to "sell" ideas, attitudes and behaviors. Kotler and Andreasen (1996) define social marketing as "differing from other areas of marketing only with respect to the objectives of the marketer and his or her organization. Social

marketing seeks to influence social behaviors not to benefit the marketer, but to benefit the target audience and the general society." This technique has been used extensively in international health programs, especially for contraceptives and oral rehydration therapy (ORT), and is being used with more frequency in the United States by such organizations as the Centers for Disease Control and Prevention (CDC), National Cancer Institute (NCI), and the National Institutes of Health (NIH) for such diverse topics as drug abuse, heart disease and organ donation (for an example see Wong, *et al*, 2004).

Like commercial marketing, the primary focus of social marketing is on the consumer--on learning what people want and need rather than trying to persuade them to buy what the business happens to be producing. The planning process takes this consumer focus into account by addressing the elements of the "marketing mix." This refers to decisions about 1) the conception of a Product, 2) Price, 3) distribution (Place), and 4) Promotion. These are often called the "Four Ps" of marketing.

The social or health marking approach is used in consumer research and needs assessment, for building sustainable distribution channels, for improving products and product selection and reducing product price, and for developing and testing products that specifically respond to consumer and distributor preferences.

Community-based Participatory Research (CBPR)

Community-based participatory research (CBPR) is an appropriate research and intervention development approach for involving special populations in the design of social marketing programs. CBPR is defined as a collaborative partnership approach that equitably involves in all aspects of the research process all those who are affected by the issue being studied – community members, organizational representatives and researchers (Israel et al., 2001). CBPR recognizes the community as an integral partner in the research endeavor; the knowledge and experiences of community members are incorporated into the research process to ensure acceptance and improve community health. It also recognizes that behavior and health are influenced by individuals' attributes as well as the conditions under which they live - the ecological models of health.

Done properly, CBPR should benefit community participants and practitioners alike. CBPR creates bridges between scientists and communities, allowing both to gain in knowledge and experience. This collaboration assists in developing culturally appropriate interventions, thus making projects more effective and efficient. Finally, CBPR establishes a level of trust that enhances both the quantity and the quality of information generated (Anyaegbunam & Kamlongera, 2002; Anyaegbunam, Mefalopulos, & Moetsabi, 1999; Viswanathan *et al.*, 2004; Cornwall & Jewkes, 1995; Wallerstein, 2000).

Combined with the principles of CBPR, social/health marketing adds value to health or injury prevention intervention design and implementation by ensuring that community members (including members of the target audience) participate in all steps in the process. This model of intervention design has as its foundation the belief that, working with specialists in the sciences of behavior change and communications, community members themselves are best able to develop their own prevention programs and to manage issues that could hamper program effectiveness (CDC, 2002).

Implications of Involving Ageing Farmers in CBPR for the Development of Social Marketing Programs

The framework described above indicates that for any communication intervention that aims to reduce farming-related injuries and deaths among ageing and limited resource farmers in America must of necessity involve that population in the research, design, implementation and evaluation of such a program. The program must involve multiple groups of ageing and limited resource farmers and farm community members from multiple states in dialogs to elicit their experiences and stories about their work on farms and their perceptions of the health and safety issues they face. Using focus groups and problem-posing techniques, this population of farmers should be involved in identifying the barriers and motivators they perceive as crucial to the enactment of healthy and safe behaviors related to their work on farms. Their perceptions of the risks they face and how susceptible they are to the risks should also be defined with this type of research.

Another aspect of the program should involve this population of farmers in research to determine the characteristics of messages they perceive as effective in

reducing health and safety challenges they face in their jobs. The research would also identify which media and communication channels older farmers think are most effective in changing their thinking and behavior as well as the local leaders they judge to be persuasive communicators of farm safety messages and practices.

The findings of this research proposed above should become the bases for the design and implementation of an effective social marketing program targeted at ageing and limited resource farmers in America.

Recommendations and Conclusion

Based on the experiences garnered from several regional, national and international projects aimed at promoting agricultural safety and health¹ the following recommendations are presented:

- Secure public and private funding for the design and implementation of a national community-based participatory research project to involve ageing and limited resource farmers in the identification of their perceptions of policy and communication issues they regard as important to their safety and health on the farm. This proposed research should start with a compilation and review of what is already known about this special population.
- Based on the findings of this research, develop a communication program that combines a national campaign to position the safety and health of ageing and limited resource farmer as important public health issues with community-based social marketing programs targeted at specific segments of this special farmer population.
- In the communication program, combine individual attitude and behavior change strategies with continuous communication aimed at social change, in particular,

¹ The National Tractor Safety Initiative, especially Anyaegbunam, Mcknight & Donovan, (2007). Social Marketing of ROPS in New York State: Program of the NE Center for Agricultural and Occupational Health.

“Keep Kids off Tractors.” A Childhood Agricultural Safety Network’s public awareness campaign. A program of the National Children’s Center for Rural and Agricultural Health and Safety, Marshfield, WI.

The Kentucky Community Partners for Healthy Farming: ROPS Project Notebook. A Project of the SE Center for Agricultural Health and Injury Prevention, University of Kentucky.

Safe Operation of Tractors: Social Marketing Campaign of the Canadian Farm and Ranch Safety and Health Association

- the program should use processes that encourage community problem identification, group decision making, action planning, and collective action and implementation, which are critical to how a community grapples with a serious issue such as the agricultural safety and health of ageing and limited resource farmers.
- Use participatory communication approaches to help ageing and limited resource farmers in the communities own the program.
 - Involve ageing and limited resource farmers in the development of communication materials, messages and other tools and tactics for their social marketing programs. This is in addition to the pretesting of all materials with groups of ageing and limited resource farmers in the targeted communities.
 - Use a 3-Dimensional multi-media communication approach that ensures that messages and information are constantly flowing vertically to and from the ageing and limited resource farmers and the program staff, and horizontally among members of the special population through the media and channels identified during the research phase.
 - Use paid media/advertising -- aim for a variety of media channels preferred by ageing and limited resource farmers and try to maximize frequency.
 - Use “earned media/public relations” -- a cost-effective way to increase the reach and frequency of your message.
 - Pitch the intervention to journalists using press releases or ready-made articles.
 - Focus on print news and radio talk shows that are popular with ageing and limited resource farmers.
 - Build partnerships with associations and institutions perceived as important by ageing and limited resource farmers. These should also be identified during the research phase. Each can assist in getting the message to the ageing and limited resource farmer community.
 - Following Roger’s diffusion of innovations model, treat agricultural safety

and health as an innovation and target innovators and opinion leaders in the ageing and limited resource farming communities with messages through appropriate channels. In several studies, farmers stated that fellow farmers are their most influential role models.

- Aim for a long-lasting campaign. Farmers in several studies have stated that short-lived, sporadic campaigns that come and go are a waste of resources because they rarely influence their attitudes and behavior toward agricultural safety and health.
- Use redundancy. Communications research tells us people need to hear new information approximately 11 times before it starts to sink in!

In conclusion, understanding the demographics and psychographics, including beliefs, perceptions, values, norms, lifestyles and concerns of the ageing and limited resource farming communities is one of the first and most important steps in assessing its health and safety needs. It is also a fundamental precursor to planning effective health/social marketing programs to prevent occupational injury and improve health among the population.

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