Adapting the Windshield Survey Model to Community Health Education

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Originally developed to locate environmental conditions conducive to the incubation and spread of communicable disease, the windshield survey technique (*1*) was successfully adapted for employment by aides in a health education project designed to persuade more women in target populations to have Papanicolaou smear tests annually (*2*). The Health Education Aide Trainee (HEAT) project was conducted in three major California neighborhoods: the Western Addition area of San Francisco (an inner city, predominately black ghetto), sections of Oakland (Fruitvale and East Oakland) with mixed ethnic populations (American Indian, Spanish speaking, oriental, and black), and a rural section of southern Alameda County.

The target population in rural Alameda County was primarily Spanish speaking. The Alameda County residents usually had only seasonal employment, primarily in agriculture, either in the fields or in the canning and packing sheds. Employment opportunities in the urban communities were varied.

Technique

Maps of each area designated for aide involvement were obtained, usually from the planning bureau of the city or county in which the target areas were located. The maps were then enlarged several times, the areas were divided into zones, and each block was numbered.

Next steps were to prepare paper tablets much like those used in the windshield survey (*1a*), showing blocks numbered to relate to the master map, and establish a code for specified "action points" (see box). The action points were beauty shops, pool halls, grocery stores, churches, drugstores, laundromats, auto laundries, housing projects, and other formal and informal meeting places as well as health care facilities (including clinics, hospitals, and health care centers), and State service centers (which are part of the California Department of Human Resources Development).

To complete mapping the communities, the aides walked through the streets of their assigned areas and made notations of specific locations of the various conversation centers. The popularity of individual locations was also determined.

They followed a similar procedure in housing concentrations, for example, large apartment buildings or housing projects. When a section of the community was obviously residential and could be surveyed from automobiles, the windshield survey method was used. The windshield survey was more useful in the rural areas of southern Alameda County than in San Francisco and Oakland.

Aides were also asked to note the names of key persons in the conversation centers. Persons whose names were sought were proprietors, the most popular beauticians, pastors of churches or heads of women's organizations, and other persons who were perceived as "gatekeepers" in the specific blocks. The basic principles of this procedure are those of Festinger and co-workers (*3*) and other more recent studies by Rosenstock and colleagues (*4*). Griffiths (*5*), and Hochbaum (*6*)

Results of Mapping

Outcomes of the mapping activities far exceeded expectations and initial objectives for this endeavor. Four aides with occasional volunteers whose number varied from block to block concluded the mapping within 10 weeks, specific popular gathering places were identified, agreements were reached with shopowners to place posters and pamphlets, early identification of "actual" gatekeepers was made, location of health facilities was noted, and liaison was initiated with other community workers in the helping and healing professions.

Additional outcomes included acquisition of new knowledge. The aides reported really getting to learn about their community. Although they had been indigenous to their area for several years, the aides relearned about their community through sidewalk pounding.

Entirely new perspectives were

gained, and observations were gleaned on people and events the aides had not known existed. The aides were able to pinpoint actual locations of discussions as opposed to preconceived notions of such spots. A similar delineation was made in the identification of gatekeepers. Real opinion leaders were not always those persons who held office in a social group or otherwise held positional titles.

Another rewarding outcome was the response of the community. People would stop on the street to ask the aides what they were doing. These contacts provided opportunities for the aides to describe their role in the community. Oftentimes entré into homes and group discussions was achieved that might have taken months or years to accomplish through any other method. Results of these street conversations included invitations to hold meetings in the homes of the target population.

An additional finding that assisted in better planning was that members of these communities had geared their life style regarding meetings, discussions, and similar activities very much to the overall pattern of the more affluent communities. Summer was a "time off" period for vacations and relaxation. Meetings on health matters were more readily identified with school and business cycles. Realizing this orientation, the aides collected data and planned programs during their first summer, and the following summer they periodically validated and evaluated their efforts.

Volunteers

The survey also became a source for volunteers. Friends and relatives of the aides and young mothers walking their babies in the neighborhoods happily and readily volunteered to "do" their block, once the purpose and simple procedure had been explained to them. These volunteers, or rather a group of them, formed a volunteer health education cadre in the community.

Residents of these communities previously had not been markedly active in volunteer work, particularly for "outside" agencies or groups. An important outcome of the survey was that the real gatekeepers, not necessarily the nominal or titular gatekeepers of specific intracommunity groups, were clearly identified.

Another source of assistance which evolved in the urban settings, and which has potential in rural areas, was the recruitment and involvement of young people in the Neighborhood Youth Corps and Neighborhood Economic Opportunity Centers. One result of this spillover was that the health education aides were asked to come to the centers to discuss personal hygiene and sex education and to "rap" about drug use.

A secondary result which took a lot of the aides' time was that they were invited to become involved in other community efforts which were not primarily health related. The aides accepted the involvements, clearly with readjustment of priorities initially established in their personally planned programs.

Through these involvements the aides gained a platform of visibility, and perhaps more important, credibility within their community. This credibility is often difficult to achieve when representing an outside agency. However, a level of trust was developed that probably would not have occurred in any other way and certainly not in such a short time.

Conclusion

The work described in this paper provided a number of additional opportunities for entré into communities and acceptance of the health education program that initially were not thought possible. This entré provided a baseline of acceptance and credibility within the community and resulted in far more women being served by more widespread and intelligent use of health care facilities and services.

For any agency or research group desirous of working in so-called hard-to-reach communities, the techniques and outcomes described here may prove propitious. Refinement and modification of this model and its implementation should provide greater payoffs over other endeavors in communities where change of behavior for improved health is sought.

Community Identification Checklist

Assignment number_____

Street and block number_____

Neighborhood gathering places	*Code number or symbol*
Auto laundries	9
Barber shops	C
Beauty shops	1
Churches	2
Community centers	6
Drugstores	8
Grocery stores	3
Health care centers	7
Housing projects	5
Laundromats	4
Libraries and other buildings	B
Pool halls	10
Small businesses	A

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