

A Model for Recruitment and Service – the University of Nevada's Summer Preceptorships in Indian Communities

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DESPITE EFFORTS TO INCREASE the numbers of Indians entering or enrolled in the various health professions and occupations during the past few years, their numbers remain far below the proportion that would be representative of this minority in the population and needed to provide adequate health care to a significantly underserved population. Historically, access to the health professions and occupations for Indians has been limited by economic costs, geographic isolation, and deficiencies in their early education. Equally important, however, has been a widespread lack of appropriate role models, as well as cultural support from the Indian community itself for such career choices by its youth. As a result, many Indian students have failed to consider a number of socially and economically desirable health careers.

Nevada is the seventh largest State in the nation, covering more than 100,000 square miles. Within it live more than 10,000 Indians who are registered on

the tribal rolls of Nevada's 23 reservations and urban colonies. Several thousand others are unregistered, since they reside in urban areas or work as transients. As elsewhere in the nation, Nevada's Indians suffer from poor health and poor health care as measured by nearly every index. An increase in trained health personnel motivated for service to this population undoubtedly would result in significant improvements in these indices.

Background of the Program

In 1974, the University of Nevada, Reno, received a special health careers opportunity grant to fund the Health Careers for American Indians Program (HCAIP). Aimed at increasing the number of Indian students enrolled in the university's model interdisciplinary health sciences program (1), HCAIP concentrated its first efforts on recruiting promising high school students into a variety of health careers requiring university level training by means of a 6-week Summer Health Careers Program.

This combined study and service program succeeded in attracting some 60 percent of the 44 participating high school students into college and more than 70 percent of those who enrolled into health careers, but student attrition was high and HCAIP's focus shifted towards retention of college level students. In particular, it was felt that a college level, clinically oriented health experience on Indian reservations and urban colonies would maintain and heighten student motivation and interest in pursuing such careers.

Accordingly, in 1976, funding was secured to initiate

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a preceptorship program that would send interdisciplinary teams of Indian and non-Indian students to remote reservation sites throughout Nevada to conduct health screening clinics. The goals of this program were to enhance the motivation and interest of Indian health science students by means of a preceptorship experience that gave them specific health service knowledge and skills in a field setting and enabled them to engage in a meaningful and specific health activity in a colony or reservation. In addition, it was hoped that the program would attract non-Indian students in the health professions and occupations and enhance their motivation to serve a significantly underserved population.

Program Description

The preceptorship program is an intensive, 3-week elective experience conducted during the summer. Student teams are trained to carry out health screening activities on Nevada reservations and colonies. Each team consists of a second year medical student, a senior nursing student, and two to four Indian undergraduate students from one of the health related programs of the university. All teams receive in-depth orientation and training lasting 1 week which involves both team building and clinical skills. The team training curriculum includes experiences in communication skills, nonverbal cooperation, consensual decision making, and cultural awareness (2). Clinical training is carried out in practice clinics, with students using each other or faculty volunteers as patients. The teams then spend the next 2 weeks in the field where they are supervised by a faculty team consisting of one medical or nursing professional and one behavioral scientist. An Indian staff member from HCAIP serves as overall coordinator. Long hours are spent traveling or conducting clinics, which are usually held in schools or tribal community buildings. Living conditions vary, with the teams spending some nights in motels and others in community buildings or camping.

Students are responsible for organizing and setting up the daily operations of the clinic. They select a team manager, who usually rotates for each clinic, and they divide among themselves the tasks which need to be done. Medical and nursing students perform the physical examination portions of the screening, since these require skills that cannot be acquired easily by the other students during the brief orientation period. At the same time, Indian students observe the physical examination process and are thus exposed to professional role models. Indian students handle other roles and tasks, including intake, interviewing, and certain laboratory procedures.

The medical or nursing faculty member supervises the screening procedures and deals with clinical problems which surface in the clinic. The behavioral scientist has no specific assignment during the clinic sessions, but is responsible for debriefing and discussions around team issues after clinic hours. The overall coordinator is the link to people in the community.

Results

In the first 4 years, 55 students have participated in the summer preceptorship experience. Their numbers by discipline follow: 17 medical, 17 nursing, 4 health education, 5 social services, 1 pre-dentistry, 1 pre-medical, 2 nutrition, 3 special education, and 6 others. Thirty-three of the students have been Indian and 22 non-Indian. Over this period, student teams have examined 1,152 clients, ranging in age from 3 weeks to 91 years. They have made a total of 401 referrals to the Indian Health Service for such problems as hypertension and diabetes, as well as for vision, hearing, and dental problems.

A self-report inventory is filled out by all participants before and after the experience. This inventory covers six general areas: (a) knowledge about team skills and procedures, (b) knowledge of client communication procedures, (c) abilities in communication with clients, (d) abilities to perform clinical tasks, (e) knowledge of diabetes and hypertension, and (f) knowledge of Indian health. Utilizing control data from another study (3), analysis of these data for the 1977 and 1978 student teams shows significant gains between pre- and post-test scores in all areas except clinical performance. This last result might be expected because of the variety of students enrolled in the preceptorships and the lack of emphasis on teaching many of these skills (see table).

Data from daily evaluation forms, completed in the field, indicate that non-Indian students have felt at ease working with Indians in a situation where whites are a minority. They have learned to appreciate the value of communication skills in developing trust between people as well as between patient and practitioner. Both Indian and non-Indian students have gained new awareness of Indian health care problems, but they have also felt frustrated that they were unable to respond more fully to the needs of patients.

Problems within teams have been over matters of daily living rather than in the clinical setting. Intensive living and working together can create interpersonal conflicts. Humor often is used to deal with problems, but students also have an opportunity to use conflict resolution skills in realistic and manageable situations. Although there are initial barriers between Indians and

non-Indians, as well as between men and women, the necessity of learning to work together as a team and the intensity of the experience seems to result in positive sentiments over time.

In general, students have found the 1-week orientation period interesting and useful, although some have suggested shortening it. Students also have proposed that team processing should take place at specific times in the field. The clinical experience has been reported as interesting and valuable to the participants, although they were disappointed by the small number of clients at some sites. Students have recommended spending more time at fewer sites, developing relationships with local health providers (physicians, public health and school nurses, and others) to effect better followup, improving communication with tribal groups and community health representatives to publicize and promote clinics, and finding better ways to reach people—by using mobile clinics or shuttle buses.

Faculty observations of student team interaction and dynamics tend to support the findings of Eichhorn (4). At first, there seems to be 'honeymoon' period during which participants are fairly careful not to offend other team members by expressing differing views. After

awhile, usually in the field, team members begin to share their differences, resulting in increased irritation with each other. Towards the end of the preceptorship there is some resolution of differences and more positive feelings among team members. Interestingly, the differences rarely emerge during clinical activities, but rather around logistics of travel, rooming arrangements, and the determination of where meals will be eaten and who will eat with whom. At least in our experience, the activities of daily living—which are fairly complicated in this experience—seem to be the vehicle by which stress, discomfort, and irritation are expressed.

Impact on the Community

The impact of the program on the different sites visited has not been formally assessed. However, many Indian communities report that the screening clinics are the only time during the year that health services are provided on the reservation. Many subsequent requests for additional services have been received and could be interpreted as evidence of a positive response to the student teams' performance on the reservations. Nevada Urban Indians, Inc., for example, has subsequently used students for preschool and screening physical examinations and has provided urban field sites, as

Summary of self-report inventory scores for participants in the summer preceptorships, 1977 and 1978 teams

Dimension	Pre-test		Post-test		Adjusted means		Test	Significance
	Team	Controls	Team	Controls	Team	Controls		
Knowledge of team skills:								
Mean	30.4	22.5	49.2	23.0	40.5	24.7	F = 23.6	¹ .01
Standard deviation	15.0	11.3	7.1	13.0	...	...
Knowledge of client communication:								
Mean	17.1	14.2	23.9	14.7	23.1	15.2	F = 13.6	¹ .01
Standard deviation	8.8	6.8	4.3	8.1	...	...
Abilities in client communication:								
Mean	11.7	9.9	16.5	10.0	16.1	10.4	F = 14.8	¹ .01
Standard deviation	7.4	5.3	4.6	5.7	...	...
Ability to perform clinical skills:								
Mean	46.1	40.9	52.3	44.7	49.4	46.8	F = 0.4	NS
Standard deviation	28.7	20.9	30.4	22.6	...	...
Knowledge of diabetes and hypertension:								
Mean	24.8	...	38.0	...	...	...	t = 3.9	^{2,3} .01
Standard deviation	14.6	...	4.9	...	...	...
Knowledge of Indian health:								
Mean	13.7	...	28.9	...	...	...	t = 5.6	^{2,3} .01
Standard deviation	9.7	...	7.3	...	...	...

¹ Degrees of freedom = 1, 30. ² Degrees of freedom = 12. ³ No controls available. NS = not significant.

well as a coordinator for year-round student preceptorship teams. In addition, at the request of Indian groups, student teams have performed Head Start physical examinations at several reservation sites during the academic year. One conclusion to be drawn from the experience is that intercultural student teams are a potentially viable service model in rural Indian settings. The teams have been accepted by the communities and seem to have facilitated trust building between non-Indian providers and Indian patients.

Student Career Choice

For all of the students, the experience has been an eye opener. Since many of them probably had a high initial level of motivation toward service, we cannot say that the experience has directly affected career choice. Nevertheless, the summer preceptorship appears to have solidified an initial, untested commitment to such work and exposed students to the realities, hardships, and problems of Indian health care.

Currently 3 of the 17 medical students are working full time at Indian Health Service sites. The remainder are still in school or residency training, and several have indicated a desire to enter the Indian Health Service after completing their training. Nearly all of the medical students are enrolled in or planning to enroll in primary care residency training. One nursing student has become a public health nurse and is arranging for teams from the university to perform Head Start physical examinations at several reservations in Nevada, another nurse graduate has set up a network of screening clinics in rural Africa, and still another is considering a position with the Indian Health Service.

A tracking system has been developed to trace the progress of the Indian students through their professional education. Because of the small number of students participating in the preceptorship experience and the fact that many are still in prebaccalaureate training, it is too early to tell if they will continue in the career path they have chosen.

Conclusions

In our opinion, the success of the program can be attributed to the following factors:

1. The tasks require collaboration among team members.
2. Responsibilities are rotated.
3. Many tasks can be and are learned by even the least qualified team member within the 1-week orientation period.
4. Open communication is stressed, and trust is developed early by the teams.
5. The planners of the experience include students,

faculty, and staff of the Health Careers for Indians Program as well as members of the Indian community, that is, a racially mixed group.

6. The students who volunteer for the experience appear to be well motivated, interested, and willing to take risks with each other.

The major objective of the summer preceptorship program was to enhance the motivation of Indian students toward careers in the health field. This objective appears to have been achieved. Of 64 Indian students currently attending the university, 21 are enrolled in one or another health discipline. Another realized objective has been a 50 percent decrease in the college dropout rate of these students.

In addition, it was hoped that seeing Indian youth in meaningful roles on the reservations would lessen the resistance of Indian elders to health careers as well as increase interest among local high school students in college enrollment. Neither of the objectives appears measurable at present.

For the non-Indian students, it was hoped that the experience would enhance motivation for service to this and other underserved populations. Although numbers are extremely small, and the selection factor undoubtedly confounds the issue, a higher than expected proportion of the participating medical and nursing students appear to have made a commitment to primary care and to such service.

Finally, the summer preceptor experience has expanded understanding of student team training and development, yielding several positive outcomes—the ability of unskilled students to learn useful health screening skills rapidly, the effectiveness of several team building exercises especially designed to enhance intercultural awareness, the impact of an intensive, 24-hour-a-day experience on team building and development, and the educational and motivational potential of such real life service experiences for students.

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