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## Using Staff Input to Set Priorities in an Indian Health Service Clinic

ROBERT C. MORROW, MD, MPH

Dr. Morrow performed this work while Medical Director, McLaughlin Public Health Service Clinic, Standing Rock Indian Reservation, SD. Currently, Dr. Morrow is a Physician, St. Joseph Alliance Medclinics, Sisters of Charity of the Incarnate Word, Houston, TX.

Tearsheet requests to Dr. Morrow, 9027 Gaylord, No. 116, Houston, TX 77024.

### Synopsis .....

*The McLaughlin Public Health Service clinic serves several thousand Lakota people (Sioux) on Standing Rock Indian Reservation, SD. In 1981, a priority-setting exercise established for the first time a grassroots expression of the concerns of the clinic's staff.*

*A three-step process was used in which each staff member first compiled an open-ended list of*

*health needs, then ranked the relative contribution of five factors to making these problems important, and assessed each problem listed by those factors. The factors used were mortality, morbidity, vulnerability to intervention, facilities on hand, and social implications. The resulting priority table represented each person's assessment of the health needs of the community. A composite table was created to represent the group's assessment.*

*The staff concluded that among the many problems listed, alcoholism and diabetes were the most compelling health problems. The priority score was almost identical for each, but the reasons were different. Alcoholism was rated highly because it was felt to be widespread and had serious social implications. Diabetes was ranked highly because it was felt to be lethal and vulnerable to intervention.*

*A significant long-term benefit to the clinic of the 3-month process was to stimulate consultation within the local clinic and to unify the health team, endowing the members with a common sense of purpose.*

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**T**HE MCLAUGHLIN HEALTH CENTER is an isolated comprehensive health care facility in the heart of the Standing Rock Indian Reservation in South Dakota. It has approximately 10,000 outpatient visits a year. In 1980, it was staffed by a full-time physician, two nurse-practitioners, a pharmacist, and a dentist, with supportive clinical and administrative personnel. Associated with the clinic are three community health nurses and one sanitarian. The clinic is part of the Fort Yates Service Unit of the Aberdeen Area of the Indian Health Service.

Standing Rock Reservation was established by the Federal Government in 1873. In 1978, it had a population of 4,659 Lakota (Sioux) Indians of the Hunkpapa and Yanktonai bands. Sitting Bull is the best known Hunkpapa leader, and most of his direct lineal descendants still live on the reservation.

The five most frequent notifiable diseases in Standing Rock in 1978 (the most recent year for which complete data are available) were upper respiratory infection, acute otitis media, gastroenteritis and dehydration, pneumonia, and

impetigo (1). Active tuberculosis remained a serious problem. Of the total population, 46 percent were under 15 years of age. This group accounted for 63 percent of all reported cases of notifiable diseases in 1978. Aside from general clinic services, special diabetic and hypertensive clinics were held once every other week. Two smaller field clinics, each approximately 25 miles from the main clinic, were visited once a week by the physician, a nurse-practitioner, and the pharmacist.

In 1981, the clinic's staff established for the first time a set of health priorities. All staff members participated in this effort (including the maintenance staff). The process took 3 months to complete.

### Methods

In the first step of the process, each clinic staff member independently listed what he or she felt were the most pressing health needs of the people served by the clinic. To establish overall priorities for the clinic, these problems each would be given

**Health problems spontaneously listed by the  
McLaughlin Clinic Staff, Standing Rock Indian  
Reservation, SD**

Alcoholism (listed by 9 staff members)  
Diabetes (listed by 8)  
Depression (listed by 4)  
Hypertension (listed by 4)  
Infectious disease (listed by 3)  
Ignorance (listed by 3)  
Obesity (listed by 2)  
Respiratory disease (listed by 2)  
Trauma (listed by 2)  
Poor home environment (listed by 1)  
Impetigo (listed by 1)  
Dental diseases (listed by 1)  
Anemia (listed by 1)  
Teenage pregnancy (listed by 1)  
Otitis media (listed by 1)  
Dependency (listed by 1)  
Irreligion (listed by 1)  
Misuse of services (listed by 1)  
Inconsistent medical care (listed by 1)

a weighted score and ranked by each staff member, and would be tabulated for the entire staff.

In the second step, the staff members assessed the relative contribution of five factors to making these problems important. The factors are listed here with the original phrasing used:

- Mortality. How many people die of this disease or problem?
- Morbidity. How many people have this problem?
- Vulnerability. How easy is it to tackle this problem?
- Facilities. Do we already have health facilities which we can use to tackle this problem?
- Social implications. How much does the problem interfere with individual self-fulfillment or the smooth functioning of Indian society?

The factor felt to contribute most to making a health problem important was assigned a weight of 5. The factor that contributed least was assigned a 1. The other three factors were given weights according to their relative contribution to the importance of the health problems. As long as there were at least one most important and one least important factor, the weights 5 and 1 could be assigned to more than one factor.

In the third step, the participants were asked to assess each problem on their lists by the five factors given previously, which were in columns in a table. The case fatality rate and the incidence rate could be used in the mortality and the morbidity columns if they were known. Assessment by the other three factors was subjective. To convert this problem assessment into useful numbers, the participant was asked to use a scale of 1 to 5. For the vulnerability factor, 1 represented "not vulnerable to intervention" and a 5 represented "very vulnerable"; for facilities, 1 represented "no services offered" and 5, "good services already in place"; for social implications, a 1 meant "not socially significant" and a 5, "extremely significant."

In the resulting table, each problem was assessed by each factor, and each factor was ranked in importance in relation to the other four factors. This table not only displayed the health problems each staff member thought important but the reasons for the ranking.

Using the numerical values in the table, a priority score was computed for each problem by multiplying the factor's weight by the numerical rating for each problem below it and summing these products across the row (see table). This method preserves the initial assessment by allowing the more important factors to contribute more heavily to the final score. A high score is equivalent to a high priority.

It is simple to rank all the health problems listed from the most to the least important by the resulting numerical scores. Consultation and thoughtfulness are required in the initial steps of the exercise. The latter steps are simple mathematical operations requiring no computers.

## **Results**

Nineteen problems were spontaneously volunteered by the clinic's staff for consideration (see box). The table shown is the final composite priority table of the 12 participants. The numbers represent the arithmetic average of the corresponding numbers on each of the separate completed priority tables, one for each staff member. The case fatality rates and incidence rates were not known for the problems listed in the subpopulation served by the McLaughlin clinic. The mortality and morbidity assessments for each problem are estimates of how important the health problem seemed to the staff as a source of death or disease to the people. Everyone's assessment was given

Health problem	Health factor (weighted value)					Score
	Mortality (3.25)	Morbidity (4.38)	Vulnerability (3.0)	Facilities (2.75)	Social (3.5)	
Alcoholism.....	3.6	3.4	2.0	1.14	3.57	48.22
Diabetes.....	3.0	2.67	3.5	3.17	2.2	48.36

equal weight in the formulation of the final priority table.

**Discussion**

This was a stimulating, unity-promoting exercise. It made each person feel part of a team. For several months it focused discussion at staff meetings, which previously had been intermittent, lackluster gatherings. For the first time, some members of the staff felt that their ideas and experiences were being solicited by the health system. Several persons expressed feelings of gratitude and excitement, and they spontaneously offered insights that in a more authoritarian system would be unnoticed and unused. Consultation engendered by the exercise cleared away pet problems that might later have impeded unified action.

The list of spontaneously offered problems includes only two of the five most common notifiable diseases, otitis media and impetigo (see box). Most likely this was because the staff was in general not trained in public health and thus was oriented toward clearly visible subgroups of the population and their problems. Otitis media and impetigo were volunteered because they represent problems of children for which the general public already has a high awareness.

The system of ranking was adapted from a more sophisticated computerized system used by Indonesia's Ministry of Health to set its national health priorities in the early 1970s. This approach to ranking problems was new to all McLaughlin clinic staff members and required careful explanation. It was sometimes necessary for the clinic's director to talk informally with a staff member, assess his or her ideas, translate them into the table, and retranslate from the chart back to the staff member to ensure the table's accuracy. Most persons had no difficulty completing the exercise on their own once it was fully explained. All staff members were able to understand the final composite table.

The average of the weights given to each factor by the participants indicates that prevalence was felt to be the most important factor. Interestingly, the facilities factor was felt to be least important, indicating perhaps a faith in the system's ability to respond. Vulnerability, a key factor to health planners, was ranked only of intermediate importance.

Among the 19 problems spontaneously offered (see box), those mentioned by the greatest number of participants were alcoholism by 9 staff members and diabetes by 8. Diabetes was a recognized priority of the service unit, and specialized clinics and programs were functioning in the clinic to meet this perceived need. Alcoholism, however, was not a specifically recognized problem. Alcoholism and diabetes were considered in the exercise to determine how they compared with each other in priority and how they were perceived by the health workers at the local clinic level.

The staff believed that alcoholism and diabetes were almost equally important, but for different reasons. Diabetes was felt to be less common than alcoholism but was ranked highly because it was felt to be responsive to intervention, and good services had already been developed. Alcoholism was rated highly because it was felt to be severe and widespread and had important social implications, such as depression, suicide, assault, motor vehicle accidents, unemployability, child abuse and neglect, neglect and abuse of the aged, and promotion of the "poverty cycle." Despite the recognition that few facilities were available from the Indian Health Service at the local clinic level, alcoholism scored as high as diabetes as a health problem.

At the time the exercise was undertaken in 1981, there were no specifically alcohol-related services or programs at the McLaughlin Clinic. Given the feelings of the staff represented by the priority charts, this must have been a significant source of frustration to the health workers there.

The result of this exercise was the design of the entire staff to develop and support an alcoholism-related program at the clinic in response to the

new and compelling priorities. The long-term benefit has been the initiation of staff consultation and the creation of a more functional health team at the local level of a large national health care system.

**References**.....

1. *Illness Among Indians and Alaska Natives, 1970-1978.* DHEW Publication No. (HSA) 79-12040. Office of Program Statistics, Indian Health Service. U.S. Government Printing Office, Washington, DC, 1979.

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## **Job Achievements of Indian and Non-Indian Graduates in Public Health: How Do They Compare?**

MITCHELL V. OWENS, EdD, MPH  
CHARLES M. CAMERON, Jr., MD, MPH  
PATTI HICKMAN, MPH

The authors are with the College of Public Health, University of Oklahoma Health Sciences Center. Dr. Cameron is Dean, Dr. Owens is Professor and Chairman, Department of Social Sciences and Health Behavior, and Ms. Hickman is Research Assistant.

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Tearsheet requests to Dr. Mitchell V. Owens, Chairman, Department of Social Sciences and Health Behavior, College of Public Health, OUHSC, P.O. Box 26901, Oklahoma City, OK 73190.

### **Synopsis**.....

*A graduate education program in public health for American Indians was introduced in the fall of 1971 at the College of Public Health, University of Oklahoma Health Sciences Center. The program*

*was initiated with support from the Office of Economic Opportunity.*

*Between August 1, 1971, and December 31, 1983, 52 American Indians received public health degrees from the University of Oklahoma's College of Public Health. Of that number, 50 received masters degrees in public health; 1 a PhD; and 1 a DrPH degree. Degrees were granted in these disciplines: biostatistics, epidemiology, environmental health, health administration, health education, and human ecology.*

*This study assesses the job achievements of 51 of those American Indian graduates. Each Indian was paired with a non-Indian graduate randomly selected from a cluster sample compiled from the school's files of non-Indian graduates.*

*The results of this study showed that Indian graduates had the kinds and amounts of responsibilities, with the exception of budget approval responsibility, that one would acquire or expect to acquire in a key administrative or staff position. The study further indicated that Indian graduates were generally achieving as much success and satisfaction in their jobs as the non-Indian graduates.*

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The University of Oklahoma's College of Public Health initiated its graduate education program in public health for American Indians in the fall of 1971. The program, which was introduced by the College's Department of Health Administration

(with support from the Office of Economic Opportunity), was aimed at educating American Indians to serve as administrators, managers, planners, and other personnel for Indian health care programs and services. The program's overall objective was to increase the number of minority public health professionals who could participate in the growth, staffing, and management of health care services and facilities.

The need for American Indians and Alaska Natives who are qualified health professionals remains greater than the supply, even though a relatively large number of students among these