

Improving medical care staffing on small Pacific Islands: a model from the Caribbean

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Abstract

Most hospitals in the Pacific have difficulties funding specialty care, and transfer major medical problems elsewhere, or bring in specialists at great cost. Facing comparable problems and staff shortages, St Jude Hospital in the Southern Caribbean instituted a program of volunteer staffing about 27 years ago. Early in 1994, a survey of 136 physicians, nurses, dentists, physician assistants, and other health professionals, resident in the United States was conducted. All had volunteered their professional services for six months or less from October 1992 through January 1994 at St Jude Hospital. The survey explored motivations for volunteering, opinions of medical care and personal backgrounds.

Sixty-eight percent responded to the survey. On average, respondents served two tours of one month each time. Seventy percent served from a sense of duty to humanity, and 35% from a sense of adventure. Ninety-eight percent felt overall care at St Jude was adequate to excellent despite limited hospital facilities and frequent changes of personnel. The St Jude model is absent in the Pacific, but it may provide a partial solution to under-staffing problems. Such a program could lessen the dependency of some Pacific nations on other countries. The factors that influenced volunteers to offer their services at St Jude need to be considered in order to create a successful short-term volunteer program at small hospitals in the islands of the Pacific.

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Introduction

Most hospitals on islands in the Pacific have fewer than 110 beds and limited funding. Lack of specialty services often means that patients with difficult medical or surgical problems are referred elsewhere, or specialists are brought in. Either alternative is costly, although some countries may pay through aid. Under-staffing also means that when physicians take their leave a replacement may not be available. The objective of this paper is to present a cost-effective plan for improving access to medical care at small Pacific hospitals using volunteer medical personnel from the United States, New Zealand, Australia and other developed countries

For the purposes of this paper, parallels have been drawn between Rarotonga Hospital, Cook Islands and St Jude Hospital, St Lucia in the Southern Caribbean. Both hospitals are on island nations that belong to the Commonwealth and have access to outside medical resources, but have limited facilities and specialist staff locally.

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Rarotonga Hospital has 100 beds, 10 physicians, about 35 nurses at any one time and 40% to 60% utilisation of its facilities. St Jude Hospital serves the southern, more rural portion of St Lucia, and about 40% of its 150 000 population. St Jude has 110 beds, 60 nurses, 15 physicians, and about 80% utilisation. One of the authors (FPW) served two tours (a total of three months) at St Jude Hospital (1992+1994) and is familiar with its operations. All the authors served at Rarotonga Hospital while the second author (G K) is familiar with many other hospitals in the Pacific.

Both St Jude and Rarotonga Hospital have no intensive care units and sophisticated technology such as MRI, CAT scan, surgical fluoroscopy, inhalation therapy, extended SMA testing or blood gases. All surgical emergencies at both hospitals are routinely covered by a general surgeon unless a surgical specialist is visiting. Rarotonga Hospital sends patients with difficult medical and surgical problems to New Zealand. However, St Jude Hospital instituted a plan, about 27 years ago, of using volunteer medical personnel to supplement permanent staff, thereby providing more comprehensive

Table 1. Study group and respondents

Category	Number in the study group	Number of respondents
Anaesthetists	15	10
Cardiologists	1	1
Registered Nurse Assistants	3	3
Dentists	13	8
Dermatologists	1	1
Emergency Room Specialists	2	1
Ear, Nose and Throat Specialists	7	5
Family/General Practitioners	17	12
General Surgeons	15	12
Internal Medicine Specialists	11	7
Neurosurgeons	1	1
Nurse Anaesthetists	1	1
Obstetrician/Gynaecologists	3	1
Ophthalmologists	2	2
Optometrists	1	1
Orthopaedic Surgeons	17	11
Paediatricians	4	0
Pharmacists	1	1
Physical Therapists	1	0
Physician Assistants	2	2
Registered Nurses	11	7
Radiologists	2	1
Urologists	5	3
Unknown category	0	1
Total	136	92

specialty coverage, and lessening the number of patients referred elsewhere.

Unlike Rarotonga Hospital, 90% of St Jude physicians have been volunteers over the last 27 years. During this period, not only several thousand physicians, but also several thousand nurses, dentists, and physician assistants provided their services free. About 60% of the volunteers came from the United States. Current licensing and references are checked by the hospital administration before volunteers are accepted.

Methods

Early in 1994, a confidential survey was conducted by mail of 136 health volunteers from the United States who served at St Jude from October 1992 through January 1994. The self-administered questionnaire asked volunteers what they thought of medical care and their reasons for offering their services. Table 1 shows the different categories of health workers in the survey and the number of respondents from each category.

Results

The response rate was 68% (Table 1). Respondents served two terms on average for a duration of one month each time. Thirty-two percent of respondents were retired. There was no significant difference between the responses of those who were retired and those who were not. All respondents received room and board, but none received a stipend. Seven percent received help with airfare and the rest paid all their travel expenses. Table 2 shows the responses to each of the survey questions.

Respondents came to St Jude from a sense of duty (70%) and adventure (35%), the beauty of the country, the beneficial exposure they thought their family would receive from travel, the educational opportunity through exposure to a variety of medical problems, and the professional gratification they would receive from working with new colleagues and grateful patients. Eighty percent of respondents were not afraid of being sued while working at St Jude.

All respondents were trained in North America. Seventy-five percent were board certified physicians with 52% belonging to an American College. Seventy-three percent wanted to return to St Jude and would have an interest in serving where English is spoken, political safety is assured, and some comforts exist. The other respondents reported time or financial constraints. Ninety-seven percent rated their tours as good to excellent. Seventy-one percent rated care by other professionals good to excellent. Twenty-eight percent rated overall care as adequate, while 70% felt that overall care was good to excellent. Nevertheless, 70% felt care at St Jude was worse than that provided in the United States, because of less equipment and facilities (e.g. CAT scan). Ninety-two percent felt continuity of care was not a big problem and that record keeping was adequate.

Seventy five percent of respondents felt the St Jude model of using medical volunteers to supplement permanent staff could be used elsewhere. Those who felt this idea might not work foresaw unacceptance by local patients and physicians, problems with credentials, and reluctance of volunteers to work in unattractive areas. Sixty two percent of respondents still in practice felt the St Jude experience sharpened their skills. The main reason given was that they learned to rely less

on high technology and more on clinical knowledge.

Discussion

When there is under-staffing, small hospitals in the Pacific should consider attracting retired physicians, dentists, and nurses from America, New Zealand, and Australia who might be interested in volunteering. This increasingly important resource in USA included 48 804 inactive physicians in 1989¹ and in 1992 some 55 656 were inactive physicians². In 1992 there were also 94 578 licensed nurses in America age 65 or older (who were apparently retired)³, and in 1991 approximately 23 000 inactive dentists (13.2% of all dentists).⁴ Among these groups are many specialists who are willing to work⁵.⁶ They feel that volunteering keeps their medical skills current and at a high level⁷. About 22% of retired American dentists in one survey said they felt useless not working⁸. This large health resource could be utilised effectively in places like the Pacific.

Unfortunately, the Peace Corps and other American public agencies do not support physician volunteers overseas whereas Germany does. Most physician volunteers from USA become aware of service opportunities abroad through word of mouth or two private organisations in America: Health Volunteers Overseas with its affiliated entities Orthopaedic Volunteers Overseas and Anaesthesia Overseas; and secondly, another organisation called Options (American Doc/Options). There is nothing to preclude able medical personnel from New Zealand or Australia willing to become medical volunteers working through the volunteer organisations listed on Table 3.

For Rarotonga Hospital and other similar Pacific hospitals with under-staffing problems a program for medical volunteers like that at St Jude may be appropriate. The health departments would be responsible for recruiting volunteers and keeping a roster of those who would like to serve, and

Table 2. Responses to the specific survey questions

Responses	No.	%
Retired practitioner	29	32
Received a stipend	0	0
Received room and board	92	100
Received help with airfare	6	7
Worked out of a sense of duty	64	70
Came primarily for adventure	32	35
Afraid of being sued for malpractice	18	20
Trained in North America	92	100
American board certified professional	69	75
Belong to an American professional college	48	52
Want to return to work again in St Jude	67	73
Rated tours as good to excellent	89	97
Rated overall care as adequate	26	28
Rated overall care as good to excellent	64	70
Rated medical care as worse than in USA	64	70
Continuity of medical care was no problem	85	92
Felt lack of facilities limited medical care	77	84
Felt St Jude model could be used elsewhere	69	75
Felt the tour had sharpened skills for practising in USA	57	62
Total response	92	68

arrange free government housing for them. A stipend could remain negotiable (if offered at all), but airfare should not be provided. Registration and approval by the local medical council could be expedited by a national co-ordinator.

Sometimes the hospital is not understaffed as much as the present staff is woefully under trained for the work they are called upon to do. Volunteers could conduct seminars and courses for local doctors and medical continuing education credits could be arranged if necessary. This survey did not attempt to define or compare end-points such as mortality rates for treatment or length of stay in hospital by the patients. Nevertheless the survey results suggest that basic medical care in St Lucia is being delivered well by American standards. Questions about the style of medical practice relevant to developing countries, issues of cultural appropriateness for certain types of care (e.g., extended care for the dying), neo-colonial dependence, and the effect of volunteers on local aspirations were not addressed.

The authors recommend that Pacific hospitals attempt to institute a program of volunteer medical workers to supplement permanent staffing. Such a program is being implemented now at Rarotonga Hospital. The health departments should request one of the organisations listed in Table 3 to advertise for volunteer physicians.

As a suggestion, the government should offer the following inducements: free housing, a scooter, one free meal a day at lunch for each family, and a minimal stipend but not airfare. Alternatively, the inducement could be a larger stipend to help defray expenses except airfare. In the beginning, the hospital would place restrictions on volunteers bringing children. Since housing and island transportation are two of the major costs for visitors, these limited inducements should work very well. Indeed, fewer inducements worked well at St Jude Hospital. The Pacific hospitals should encourage medical volunteers to bring medical and surgical supplies with them when they visit.

Table 3. List of volunteer medical organisations in USA

Organisation	Address and phone	Contact persons	Comment
Health Volunteers Overseas (HVO)	c/o Washington Station # 65157, Washington D.C. 20035. Phone (202) 296 0928.	Nancy Kelly (Executive Director) or Kate Skillman (Coordinator)	Volunteers Overseas and Anaesthesia Overseas are affiliated entities. HVO has many programs world-wide and are very successful in placing physicians. It is a secular organisation.
Options	3550 Aftan Rd., San Diego, CA 92123 or P.O. Box 85323, San Diego, CA 92186. Phone (619) 279 9690. Fax (619) 694 0294		Part of Project Concern International, it puts out a flier listing opportunities abroad for volunteers.
Southwest Teams	3547 Camino Del Rio So., Suite C, San Diego, CA 92108. Phone (619) 284 7979.	Mr Barry La Forgia, President or Rose, the Program Director	They have programs for sending physicians for disaster relief and provide developmental work and cleft palate care in Mexico and Peru.
Medical Group Missions	CMDS, P.O. Box 830689, Richardson, TX 75083. Phone (214) 783 8384		Part of Christian Medical and Dental Society. They organise two week trips to countries in South America, Caribbean, and Africa.
International Medical Corps	Dept. 93-022, 12233 West Olympic Blvd., #280, Los Angeles, CA 90064. Fax (310) 442 6622.		This is a non-profit medical relief organisation active world-wide
Medicins Sans Frontieres (Medicine Without Boundaries)	In USA: MSF USA Inc., 30 Rockefeller Plaza, Suite 5425, New York, N.Y. 10112. Phone (212) 649 5961.	Chantal Martell, Executive Director of MSF USA	The MSF USA office is overseen by a board of directors headed by Richard Rockefeller, a member of the Rockefeller Brothers Fund.
Catholic Medical Mission Board	10 West 17th St., New York, NY 10011. Phone (212) 242 7757.	Michael McCarthy	
Interplast Inc.	2458 Embarcadero Way, Palo Alto, CA 94903. Phone (415) 424 0123	Amy Laden, Director of Medical Services	
Rotary International			Local rotary groups can put you in contact with this group, and must give you their support. They have an active program of providing dental care overseas.

Conclusions

Ninety-eight percent of survey respondents felt that overall care was adequate to excellent at St Jude Hospital. These respondents felt that frequent changes of staff, limitations on testing, and unavailability of high-technology equipment did not significantly hinder basic care. Because the volunteers were highly trained, their opinions of medical care have validity. Volunteering allowed retired personnel to remain active in medicine. Volunteers wanted to be free from the problems of malpractice and licensing, but were aware of few opportunities for serving abroad in attractive areas of the Pacific, like the Cook Islands.

The lessons learned at St Jude are relevant to utilising the large number of retired American medical personnel, and those from other countries like New Zealand and Australia, to supplement under-staffed small hospitals in the Pacific.

Such a program could lessen the dependency of certain Pacific nations on aid. The medical care and education, hospital utilisation, and hospital efficiency would improve. Experiences at St Jude over the last 27 years showed that this can work effectively.

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The Spokane Diet

Lose 10-17 pounds in a week! This 7 day eating plan can be used as often as you like. In fact, if you follow it correctly it will give you a feeling of well-being you never thought possible. After only 7 days you will be lighter by at least 10 lbs and have an abundance of energy. Continue this plan as long and as often as you wish and feel the difference in both medical, mental and physical disposition.

- DAY 1** Any fruit except bananas. Your first day will consist of all the fruit you want, except bananas. Melons are especially good. All the soup you want.
- DAY 2** Any vegetable, raw or cooked, except dry beans, peas and corn. Green leafy vegetables are especially good. You may also have a large baked potato with a pat of butter. All the soup you want.
- DAY 3** Fruit and vegetables, same as Days 1 and 2, except no potato. All the soup you want.
- DAY 4** Eat as many as 8 bananas and drink 8 glasses of skim milk. Bananas are high in carbohydrates and will lessen any craving for sweets. All the soup you want.
- DAY 5** Beef and vegetables. You can have up to 20

ozs of beef and 6 tomatoes. Drink at least 8 glasses of water in order to wash away any uric acid from your body. All the soup you want. A baked potato.

DAY 6 Beef and vegetables. Eat as much beef and vegetables as you want. No potato. All the soup you want.

DAY 7 Brown rice, unsweetened fruit juice. Fruit and vegetables. All the soup you want.

SOUP RECIPE

- 4 to 6 large onions
- 4 to 6 whole tomatoes, *pref. fresh*
- 1 large stalk of celery
- 1 to 2 green peppers
- 1 large head of cabbage
- 1 packet of onion soup mix for each 4 cups of water.

Cut up the vegetables and cover with water in a large pot. Boil for 10 minutes, cover and simmer until all the ingredients are soft.

Eat as much of this soup as you wish whenever you like as it will not add calories. The more you eat the more weight you will lose.

This diet for overweight heart patients is believed to come from the Spokane Heart Hospital in Spokane, Washington. It has been tried by staff members of SPC and others. It works.