Marshallese file

403727

THE BROOKHAVEN MEDICAL PROGRAM TO DETECT RADIATION EFFECTS IN MARSHALLESE PEOPLE:

A comparison of the peoples' vs. the program's attitudes

Konrad [illegible] Kotrady, M.D.

1 January 1977

REPOSITORY DOE-FORRESTAL
COLLECTION MARKEY FILES
BOX No. 5 of 6
2.8 MARSHALLESE ISLANDS
FOLDER #2 NOV 1976 - OCT 27, 1977

1012199

I. Purpose

This report is intended to provide an assessment of the medical program as conducted by Brookhaven National Laboratory in the Marshall Islands. Between June 1975 and September 1976 I served as resident physician for the program in the islands. During that time I became acutely aware of a difference in perception for the purpose of the medical program between Brookhaven and the Marshallese being studied. Since my return to the United States, letters from Utirik and Rongelap have been received indicating the peoples' feelings and desires. This report will attempt to explain where the problems lie and to help explain the basis for the peoples distrust and dissatisfaction for the present program. It is hoped that these views can be used to objectively reassess the program and improve on it in the future.

II. Background

In March, 1954, a thermonuclear device was detonated at Bikini atoll in the Marshall Islands. Through an unfortunate series of events, Marshallese people living on the atolls of Ailingnae, Rongelap, and Utirik were exposed to radioactive fallout within hours of the explosion. These islands lie almost directly east of Bikini at a distance of 80, 100, and 280 miles respectively. A group of U. S. servicemen at Rongerik, 120 miles east, were also exposed to the fallout but are not included in the Marshall Islands medical program.

Knowledge of the human exposure to the fallout was reported to authorities within hours when detection equipment at Rongerik began to register the abnormal levels. It required, however, 2-3 days to completely evacuate the populations of the exposed islands. The exposed people were taken to Kwajalein for decontamination and medical evaluation by an assembled group of U. S. physicians. Decontamination procedures consisted primarily of repeated bathing to remove the residual fallout particles from clothes, skin, and hair. The people from Rongelap and Ailingnae were found to have evidence of radiation sickness manifested by skin burns, gastrointestinal disturbances, hair loss, and hematologic changes. All these problems were transient, resolving within a few weeks. The exposed people from Utirik manifested no symptoms of radiation injury and the difference in the two island groups was attributed to the difference in radiation dose received by each population. There were no fatalities from the initial exposure to the fallout. A few people from Rongelap were left with permanent scars from the radiation burns.

The exact levels of radiation that each group of people were exposed to have been difficult to ascertain. Much of the difficulty centers on the fact that there were no detection instruments on the islands, except at Rongerik where the Americans were stationed. The initial radiation levels that the people were exposed to were estimated from measurements of residual radiation remaining on each island about one week after the fallout occurred, as well as the known levels actually measured at Rongerik by the monitoring personnel.

1012200

It was determined that the radiation consisted primarily of gamma and beta rays of various energies. The beta radiation was of low energy and failed to penetrate deeply into the skin layer and was the cause of the superficial burns seen on the Rongelap people. Doses of this radiation ranged from 2000 rads at the feet to 300 rads at the head. Gamma radiation on the other hand is a high energy form that could penetrate the entire body. Dosage estimates for the gamma dose are 175 rads at Rongelap. 69 rads at Ailingnae and 14 rads at Utirik. A third source of exposure was that of the internal absorption of various radioisotopes from inhalation of the fallout and ingestion of contaminated food and water. These figures have been more difficult to determine. Various parts of the body were exposed to varying degrees of all these radiation sources. The thyroid gland, for example, received both gamma and internal radioisotope exposure. Estimates on the dose received by the thyroid gland of people at Rongelap range from 220 to 450 rads for adults, to 700 to 1400 rads for children. For the people at Ailingnae and Utirik, the thyroid dosages for adults were estimated to be 135 rads and 27 rads respectively. A detailed explanation of the dose assessment can be found in the 20 year report. ("A Twenty Year Review of Medical Findings in a Marshallese Population Accidentally Exposed to Radioactive Fallout", Robert A. Conard, M.D., et al, Brookhaven National Laboratory, 1975).

Following their evacuation from Rongelap and Ailingnae in 1954, residual radiation contamination prevented the people from returning to their home island until 1957. As part of the resettlement, the village was reconstructed and domestic animals replaced by the U. S. Atomic Energy Commission. The people of Utirik were permitted to return to their island within six months after the explosion when it was determined that the radiation was at safe levels for habitation. The Bikini people were removed from their atoll in 1946 in order to provide the United States with a nuclear testing site. It was not until the early 1970's, after a 12 year absence of testing, a massive clean up operation, and environmental studies of the residual radiation, were the people allowed to begin to return to their island.

Since 1957, a yearly medical surveillance program for the Rongelap people and a tri-yearly medical evaluation of the people of Utirik have been carried out by scientists and physicians of Brookhaven National Laboratory under the direction of Robert Conard, M.D. In 1973, a Brookhaven physician, Knud Knudson, M.D., was stationed in the Marshall Islands as a result of the peoples' insistence on better medical evaluations. As a result of this insistence, medical surveys were increased to quarterly trips with yearly complete examinations at Rongelap, still tri-yearly examinations at Utirik and bi-yearly hematologic surveys. The increased frequency of visits was also prompted by the death of a young Rongelapese man, exposed in 1954, from acute myelogenous leukemia attributed to the radiation effects.

My association with the program began in June 1975 when I became the resident physician in the Marshall Islands. During my 14 months of work, many hours of discussions were had with groups of people from each atoll regarding the survey's work. What was found was a major difference in expectations between what the people perceived as their needs and how the

1012201

Brookhaven program could help solve those needs, and the stated goals of the program and how it thinks it should interface with the people. The people seemed to universally feel that in the past their opinions have not been understood or taken seriously for discussion. This report will attempt to clarify the expectations of both sides such that a better understanding can be reached.

III. Philosophy of Program in Past

The medical surveillence program as conducted by Brookhaven is a research oriented program. Its goal is to focus on the narrow subject of what are the late radiation effects in the exposed Marshallese people. The program has compiled notable results and the reader is referred to the recently published twenty year report. Under closer analysis, however, the program is even more limited in its objectives. In 1954 following the accident, the knowledge of radiation effects on man was markedly limited. Thus, the original purpose of the program was to be as broad as possible to discover all possible effects known and unknown. Over the years, however, data from various sources and opinions of experts have assessed what long term effects should be found in the people. Thus, now the program seems to operate in a mode of looking for those effects predicted by experts in the field of radiation medicine. It is the original goal of a broad general program that the people have come to understand and expect to happen. They have heard scientists tell them over the years that the long term effects of fallout exposure are unknown and the program wants to determine what will occur. They see this goal being achieved by a general but comprehensive program that assesses and treats all their health needs as well as the needs of their descendents. It would be so complete a program that the slightest change would be detected and assessed for its value. The program, however, does not see the need for such a general health evaluation program. Rather, it tends to focus on specific areas, such as the thyroid and blood, where the scientists expect effects to occur.

It is the very narrowness of the program that the people have picked up on and have caused them to have disagreement with the program. The program as presently directed would function well in any sophisticated health oriented nation where a variety of medical care systems could be used to provide care for the general health care needs of the people not covered in the research program. In the Marshall Islands, however, the program operates in a virtual medical vacuum. The people on the islands of Rongelap and Utirik see more of the Brookhaven medical team in one week than any other medical personnel in a year. The philosophy of Dr. Conard and the Energy Research and Development Administration is that the Brookhaven research program should not be concerned with the general health care needs of the people except to assist local government programs. The general health care needs are said by both parties to be the full responsibility of the Trust Territory and Department of Interior, despite knowledge that neither has a workable plan for delivering health care to any of the outer islands such as Rongelap or Utirik. Some general health clinics have been conducted by the survey teams but not to the extent desired by the people to meet their needs. The people also perceive

1012202

that a greater emphasis both in time and money is devoted to the research effort than the general health program. They are aware of the imbalance of the efforts and fail to understand it.

IV. Trust Territory Health Care

The delivery of health care in the Marshall Islands, particularly that provided to the outer islands, is sporadic at best. Health care is concentrated at Majuro, the District Center, and Ebeye, where a sub hospital is located. Both hospitals are understaffed and suffer from lack of properly trained personnel, lack of medications, and inadequate facilities. The outer islands, such as Rongelap and Utirik, are served by a health aide on each island. He is inadequately trained, lacks proper or sufficient medications. A Trust Territory physician rarely gets to visit the outer islands. Discussions with physicians in Majuro indicated that a physician accompanying a field trip ship has not occurred in over two years. The islands are totally dependent on the Trust Territory field trip ships to bring in supplies and transport referral cases. Major emergencies can, in some instances, be air evacuated but it is on a limited basis only.

The Brookhaven program has identified that upwards of 30% of the population has adult onset diabetes mellitus. Here is one area that Brookhaven could expand its work by providing diabetes clinics for the people. Current therapy in the islands is oral hypoglycemics, which admittedly are controversial but still used in the United States. Oral hypoglycemics offer some help to these people where insulin cannot be used.

The vaccination situation in the islands is totally inadequate. A review of immunization records of children on Utirik, Rongelap, and Bikini revealed no children under 5 with completed series for polio, diphtheria, tetanus, or purtussis. Children who have lived in the district center are the exceptions. Vaccination serum provided by the Trust Territory has often been out of date. There is no refrigeration on field trip ships to permit adequate transport of the serum without deterioration. Public Health nurses from the Trust Territory had not visited these islands for over 2 years until I asked them to accompany my medical surveys.

Family planning and contraception are needed throughout the district. Other areas of concern are nutrition education, amebiasis control, all of which can be dealt with by the Brookhaven physician conducting public health programs.

V. Peoples Expectations

1. Rongelap. These native people all express that their greatest need lies in the general health area. It is the problems that effect their daily lives and the lives of their children that hold their greatest concern. They all fear what effect the radiation might have on their lives and tie it in to their general health needs. The concept of research is totally meaningless to them. The people all see a doctor as a man giving care to all their problems and not focusing on only one small area of concern. They fail to understand how a doctor

1012203

can come to their island and say he is only interested in radiation problems and that anything else is the concern of another doctor hundreds of miles away in the district center who they probably never see. It is no wonder that the people say that the survey team has a lack of interest in their general health care needs when the research effort is what the program emphasizes. The people have no strong association with the Trust Territory health system because they never see it. It is the Brookhaven doctors that appear on a regular basis and are the doctors that the people expect and want to provide their total care. The peop can also appreciate the vastly better care that the Brookhaven doctors provide compared to what is available in the local system. Even when Trust Territory medical officers accompany the survey, the people still know that it is Brookhaven and ERDA who have the responsibility, money, and control.

It is the research profile of the program that has created other misunderstanding with the people. Several years ago, the charge was made by many Marshallese that the people examined in the program were being used as guinea pigs in an experiment on radiation effects. This charge touched off a bitter controversy and vigorous denials on the part of the program directors. Yet, even now the people feel an intense awareness of being subjects of a research project rather than willing participants of a general health care program.

It is not hard to understand the people's point of view if you can drop all your American ideas and bias about medicine and try to see things through the eyes of someone living on a relatively isolated primitive outer island. Consider - each March a large white ship arrives at your island. Doctors step ashore, lists in hand of things to do, and people to see. Each day a jeep goes out to collect people for examinations, totally interrupting the normal daily activities. Each person is given a routing slip which is checked off when things are done. They are interviewed by a Marshallese, then examined by a white doctor who does not speak their language and usually without the benefit of a Marshallese man or woman interpretor. Their blood is taken, they are measured, and at times, subjected to body scans. In the end, people say they are sent on their way with little or no explanation or medicines despite many complaints. People indicated that they have complained of certain problems for years and the doctors always do nothing or tell them nothing. Now if an American was to go through this process each year for twenty years, would he also not consider himself a research subject - a type of guinea pig if you will?

The people feel that they have no input into decisions about their examinations and care. The doctors always appear with a predetermined plan of what will be done, who will be seen, and what will be achieved. The people are not consulted beforehand and are essentially ordered to do things the way the American doctors have established the plan. Such plans are usually formulated on American cultural guidelines and neglect the local traditions. When the prople raise any hint of an objection or seek to question some point, the doctors think they are only trying to cause trouble. What seems to be forgotten is the patient's right to decide how, when, where, or by whom he/she is treated. It is easy for a research project to neglect such patient's rights and feelings in the interest of the outcome of the program.

1012204

An example of this last problem occurred in March of 1976. It was decided by the program directors that as part of the March survey three patients from Rongelap and one from Utirik would return to Honolulu for detailed examinations. Arrangements were made and plans drawn up without consulting the people if March would be a good time or what would be done for each family while the mother was away. They were told one month prior to the survey to stop their medications and asked if there were any objections to the outlined plan. When it was discovered that the woman at Utirik failed to comply with instructions, harsh words were expressed that she had ruined expensive plans and was unreliable. When the three women at Rongelap objected, the medical group got upset, again thinking that the people were just causing trouble, preparations were being upset, etc. When the three ladies requested a meeting to discuss their objections and work out a solution, Dr. Conard refused the request. Instead each lady was confronted individually such that each felt intimidated and threatened such that all she could do was accept. However, none of them were really pleased to go and all freely expressed their ill feelings to others.

The people on all the islands feel that the program fails to understand and accept their local traditions and culture. They claim that things are done according to American standards rather than Marshallese. The problem creates only another gap of understanding between the doctors and the people.

By tradition the Marshallese are a food gathering society. Their daily activities center on food collection and its preparation. Now food collection has been replaced to some degree by copra production as a cash source to purchase foodstuffs. March is a month of low food availability. It is a month near the end of the dry season and local crops are not producing well. In the past, it was a time when people depended on preserved foods. When the team comes in March, it totally disrupts the daily activity of the island for up to one week. For their examination, people are taken away from their daily chores for up to an entire morning or afternoon. Women are taken from cooking, washing, or tending children and men from food or copra collection. In the past, people at Rongelap have asked for food to be supplied when the examinations force people away from their families and food chores. Such a request has been repeatedly refused. When the people asked for a meeting to discuss this issue in March, 1975, this request was refused as well.

The people are very humble and generous. They would much rather be polite and answer with what they think would be pleasing rather than give a negative response. At the same time, they will express their true feelings to their friends. They are easily intimidated by authority, particularly an American. The American is looked at as being all powerful, full of resources, and virtually able to provide anything he desires. This concept is similar to the view of the king in ancient times. To be openly critical of the power is not done because the Marshallese fears the loss of the rich resources the American possesses. Recently, the people have been more open in their criticisms, as shown by recent letters from Rongelap and Utirik. The program tends to reinforce this concept, as virtually anything the doctors want from tractors to trailers to electricity to a ship (that serves only the program) - a never

1012205

ending supply of wealth in the eyes of someone with so little. They then fail to understand how the doctors can refuse them food, saying it is too expensive when the "richness" of the program abounds. They cannot understand how the doctors can refuse to discuss important but sensitive issues at meetings.

The Marshallese operate on a different time frame than Americans and it is difficult for a time conscious American to understand. Nothing is done by the clock in Marshallese society. "Marshallese time" is looked on as a joke and causes the time oriented American only exasperation when his plans are delayed. Yet when one understands Marshallese time in the perspective of the culture, it becomes an important part of understanding the people.

Rigid time schedules are unknown in this society. When a visitor arrives on the island, it is expected he will spent time in greetings and stories - being friendly - rather than rushing around getting work done. Meetings are never expected to start on time. After all, what is time to these people on their isolated island - it has no meaning, no necessity. When all the people have gathered after finishing all their work, only then will the magistrate say the meeting is ready to begin. A criticism from the people is that the Americans always start meetings on time and many people miss what is occurring. Similarly, one must be patient and endure long silences at meetings. Usually it will be found that criticisms and problems come up only at the end. It is the idea of a time conscious American vs. a time independent Marshallese.

Another area of culture concern is the male-female relation in health matters. A male family member is not permitted by custom to be in the room when a female family member is being examined. Similarly; when a person is sick, it is the females who tend to the needs of the patient. Women who have returned to the United States feel that a female interpretor should accompany them for this reason. The idea of an interpreter is important because in the past people have traveled to the United States without a guide for the entire trip who can help them. Not knowing English and the shock of the cultural change makes the sudden exposure to the United States frightening to the people.

The people of each atoll have some individual criticism of the program that needs to be examined. The islands of Utirik and Rongelap have recently written separate letters indicating the mood of discontent that exists. (Appendix) Their feelings expressed in the letters are genuine and on close questioning, these feelings have been present for many years. However, in the past, the people have felt afraid to openly verbalize their feelings. The fear grew out of the people's perception of the United States as the authority and provider, as discussed earlier. They thought that criticism would mean discontinuing the contact they have with the program.

2. Utirik. The distrust for the program at Utirik first surfaced openly in March of 1976. At a village meeting, various people thought it time to express what they have been thinking for so long. An open distrust for

1012206

Dr. Conard was expressed and recently negative feelings about Dr. Knudson have arisen as well. The distrust is not intended as a personal attack but rather is pointed at the attitudes and philosophy of the program that they express to the people.

The program as conducted at Utirik has sharply split the island into two groups - those exposed people examined regularly by the Brookhaven team and a larger group of unexposed people who receive only indirect attention. This situation differs sharply from the way the program operates at Rongelap. At Rongelap, the people were divided into two groups - those exposed and a larger unexposed group which serves as the control group for the research protocol of the study. At Rongelap both groups receive the same detailed examinations so virtually the entire islands population receive care. At Utirik, no control group exists, so only the exposed receive care from the team. The people at Utirik see this difference between their atoll and Rongelap and wish to receive equal treatment by the team.

For twenty-two years, the people have heard Dr. Conard and other doctors tell them not to worry, that the dose of radiation received at the island was too low to cause any harmful effects. Apparently, the experts assured the program that according to theory a low dose of 14 rads should not cause any adverse human effects. Hence, the program examined the Utirik people in detail only once every three years, no control group was established, and the people received only minimal compensation. However, within the past year it has become apparent that the theory was wrong and in reality effects attributal to radiation have been discovered at Utirik. It has been found that there is as much thyroid cancer at Utirik as at Rongelap - 3 cases each. In fact, the ratio of thyroid cancer to thyroid nodules found in exposed people at both islands, is higher at Utirik than at Rongelap. In addition, a young man, son of an exposed person, was found at Utirik to have thyroid cancer and no such unexposed case has been found at Rongelap. The official explanation for the high incidence of thyroid cancer at Utirik is unknown at present. Yet in the peoples mind the explanation is that it is a radiation effect despite what the doctors have said for twenty years. The distrust the people have for Dr. Conard developed because of the inconsistency when he stresses no problem exists and then, at a later time, an actual health problem arises. The people ask if this thyroid problem has suddenly occurred, is it not possible that the experts have been wrong for so many years and that more problems will occur in the future?

The theory was put forth that Utirik received low radiation so a detailed follow up was not necessary. Now the facts of the thyroid cancer at Utirik have strongly shown that the theory is wrong. Furthermore, the Rongelap exposed population has been on Synthroid since 1964 for suppression of normal thyroid gland function to try to prevent the development of further thyroid lesions. The new findings raise the question of whether the Utirik people should also be on such a thyroid suppression program and that if it had been started at the same time as Rongelap, the thyroid cancer at Utirik might have been prevented.

1012207

It also further emphasizes to the people that the United States really does not know what the effects of radiation are. The idea that one control group based at Rongelap can serve for the Utirik people might also be wrong. The people at Utirik differ from those at Rongelap inasmuch as they received less radiation and returned to their island sooner such that the two groups maybe cannot be compared equally.

The people at Utirik sense that the Brookhaven doctors are always in a rush to leave their island. The doctors always spend less time at Utirik than at Rongelap and the people know this fact. They feel that the doctors have no interest in seeing the unexposed people. Doctors have come with a list of people to be seen and others are seen only if time permits. According to the magistrate and chief at Utirik, until my visits to the island, there has been no AEC doctor who has wanted to examine the exposed and unexposed people on an equal basis. The unexposed people were made to feel unwanted at the "sick call clinics" in the past.

The recent discoveries of thyroid cancer at Utirik and the peoples fear that all effects of radiation are still unknown points to another area of concern of the people. It is a concern by the people of Utirik and also expressed at Rongelap, as to their desire to have a program that will be able to detect even the most subtle effects. At Rongelap, the people expressed the view that the doctors could never miss a thyroid nodule but worry that other problems might go undetected. The health aide cites two cases in the past cases in which the survey reportedly found normal examinations yet within a few months the people became seriously ill and on examination on Majuro were found to have terminal cancer problems. The people express their concerns as a need for a more general comprehensive examination program along with the specialists who accompany the team. At Utirik the additional request is made for yearly detailed examinations rather than tri-yearly as is presently done. At the same time, the people see the general physician as being someone to treat all their problems.

Another problem shared by both the people of Rongelap and Utirik is a concern for the program's lack of desire to examine their children on a yearly basis. It is the people's concept of a doctor treating everyone that leads to differing views about examining children of the exposed population. As parents everywhere, Marshallese worry about the health of their children. For the parents at Rongelap and Utirik, there is the added fear of the radiation and if it will affect their children. This fear was intensified when new thyroid effects were found at Utirik. They fail to understand why the program does not want to conduct active examinations on the children. The program contends that after one screening examination, a chromosome study, and Japanese studies, that experts say there is no need to worry as nothing will occur. Yet the people have heard this response before, have seen the experts to have been wrong (as the thyroid cancer at Utirik pointed out), and they worry that something might show up in the children. Curiously, the Marshall Islands are different than Japan. In Japan, there is a large normal gene pool to dilute out changes while in the Marshalls the custom of intermarriage of families on the islands might select out effects. The Marshallese received

10122O8

indirect fallout radiation rather than direct radiation as most of the Japanese received at Hiroshima and Nagasaki. (Body burdens of various doses of internally absorbed radiation were experienced by the Marshallese). At the same time, the children probably received higher doses of total body gamma radiation than the adults because they are smaller and closer to the ground and the fallout. Theorists claim that the small numbers involved mean that it is statistically unlikely for a genetic effect to occur. Yet the people feel that even if there is a small chance of anything occurring they want a program to be able to detect it. At present, they worry because their children are not included as part of the regular examinations.

Medical records create another large problem in providing care. Because of the research nature of the program all the detailed examination records on the people are kept at Brookhaven rather than with the resident physician. People complain that they have told the doctor the same problems for several years yet he fails to help them. The doctor cannot recognize the complaints because each patient's chart is over 8,000 miles away. To a clinical practicing physician the patient's chart is an important part of providing good quality of care. In the United States no doctor would think of examining patients in New York and hope to provide good care if all his patient records were in Honolulu. The lack of these records to be readily available impedes patient care. At present, a summary sheet of pertinent data is provided each year but lacks the precise description of a finding as given by a physician that could be important. A request to shift the records or a duplicate set to the islands was considered impossible and a request for a secretary to upgrade the local system was met with budget obstacles.

3. Bikini. The people at Bikini wish to be included in as intense a medical care program as conducted at Rongelap just as Utirik desires the same care. The people living at Bikini fear the "poison" (radiation) that might be lingering on the island. The official policy is that there is no reason to conduct a medical survey program on these people as they received no radiation exposure. A massive clean up and replanting operation supposedly eliminated residual radiation. However, environmental studies still show areas of radiation concentration. In addition, the people have been asked not to eat certain local foods because of the possible danger of radiation. The people worry about the potential danger of secondary doses of radiation received from eating local food, drinking the water, and just ground exposure. Recently, plutonium was discovered for the first time in significant levels in the urine of residents of Bikini indicating the people are absorbing some radiation. The people fail to understand how scientists can say they do not know all the possible late effects the radiation can cause, that indeed plutonium and other lingering radiation exists on the island such that some foods cannot be eaten, and then tell the people there is no danger and a medical program is unnecessary.

If in forty or fifty years medical problems do occur as a result of the exposure, it would be better if a well designed medical program was already in progress to detect the problems. Waiting to devise a program until after the events occur as has happened at Utirik would be contrary to the basic

1012209

hypothesis of investigating late radiation effects. The people desire that the doctors simply do not say "There is no danger" but rather admit "we do not know completely" and design a program of continuing medical observation and examination of all the people.

When discussions have arisen concerning the need to expand the program to allow examination of all people at Utirik, children at both Rongelap and Utirik and the people living at Bikini, officials argue that time and money are not available. In 1974 when implementation of public law 5-52 was being discussed, the program director argued that children should not be examined not only because there was no need but also that time simply did not allow for it. It is stated that the experts who come on the March survey can be away from their normal medical practices for only a short time and that this is a major limiting factor for the time that team can spent on each island. However, others as well as the people themselves do not feel that lack of time is a sufficient reason not to give adequate health care. The people have interpreted, furthermore, the lack of time issue as a lack of interest and a distrust for the program. To the Marshallese time is never a factor to consider if someone truly wants to be with someone else - not only for friendship but for health matters as well.

Philosophy of Program 1975-76

The medical survey program since June 1975 has shifted its emphasis. Rather than conveying the message of research, it has tried to develop along the lines of a general health care and maintenance program. The new direction given to the program during this time was accomplished without added expense, with improvement in health care, and still maintaining the research data collection. People at all three islands have noted the change and responded favorably and enthusiastically. People now felt that they wanted to come to see me and not that they were being forced to do so. Their concern about better total care has been appreciated and responded to by the resident physician. At Utirik people have stated that it was the first time a doctor from AEC has come interested in seeing everyone on the island on an equal basis, whether exposed or unexposed.

As the resident physician for the program during this time, I shared the people's needs for health care rather than research. My specialty training and interests are in the fields of family and community medicine. It is easy for me to perceive the human side of medicine focusing on human feelings and social needs than on the colder nature of research. As the physician surveying the health of the people on each island, I recognized the needs and expanded the program to include regular vaccination programs, family planning, and contraception clinics, venereal disease clinics, well baby clinics, pre natal care, general medical and minor surgery clinics. I was told on several occasions that supplies for such clinics, particularly vaccine, birth control pills, pre natal vitamins, oral hypoglycemics, should come from the Trust Territory and not from Brookhaven. Brookhaven did provide limited supplies but felt any

1012210

expansion beyond this limited involvement meant they would not be able to supply such materials.

The people's confidence was gained by dealing with them as people and not just someone on a list. A close doctor-patient relationship was created. More time was spent on each island and the people treated equally with no selectivity. Public health personnel accompanied the trips to provide direct people contact and to assist in the examining room with translations and patient procedures. A young Marshallese laboratory technician was also utilized to improve patient relations. The response from the people was overwhelming. Brookhaven, although enjoying the good work, still responded that the project was still research directed and that general health care responsibilities were up to the Trust Territory. The resident physician could only assist in providing general health care but not take responsibility for such work as part of the Brookhaven program. As a clinical physician I could not operate a health care program one handed. I could not diagnose a problem and then respond by saying it is not my responsibility, but Trust Territory to take care of it. Especially, when I knew I could manage it better than the Trust Territory health system.

A close check would reveal that ERDA had funded a general health care project during my year as resident physician as that was the priority need of the people. It accomplished the same results as the old narrow research program but achieved more in that the people got better care and it developed a better response from the people.

The Marshallese people have become remarkably sophisticated over the past few years. The American political and economic systems have taught them the importance of the dollar as well as giving them aspirations for better homes, food, health care, and employment. They are not to be viewed as "children" as was the opinion of some people. Their aspirations will continue to increase in the future.

The medical project that is conducted in the islands should be the best one the U. S. government can provide. At present that does not occur. The people feel that the United States has a moral and legal responsibility to provide care for them as a result of the fallout accident. The program should operate free of interference from Washington or Majuro. The desire of Drs. Conard, Knudson, and Kotrady is an intense effort to improve the quality and quantity of medical care delivered to the people. Physicians in the past have supported general health care efforts but have been stymied by the lack of official sanction and limited assistance. I chose to ignore the rigid policy and in doing so demonstrated that a better program could be accomplished in the islands.

1012211

VI. Recommendations

The following recommendations are made as a first step in improving the quality of the program.

1. emphasis total health care for the people of Utirik, Rongelap, and Bikini rather than the constant stressing of research. The Brookhaven program should assume full responsibility for all the health care needs of the people on these islands until an adequate local program is established to provide the care. The data collection of the research component can be accomplished in the broad general health care program.

2. continue to develop the doctor-patient relationship such that people feel invited to see the doctor not forced.

3. expand the program such that all the people at Utirik are included for yearly examinations and quarterly survey medical care.

4. expand the program to permit children of the exposed people to have examinations on a regular yearly basis.

5. expand the health care program so that people living at Bikini and eventually those returning to Enirvetok be included in the quarterly medical visits for health care.

6. provide funding to improve the education of the health aides at Rongelap, Utirik, and Bikini. This education would provide better care for the people when the doctors are not on the island. Better records would be kept. Make the resident physician more responsible for daily health care problems via a radio network.

7. complete health records of all the people should be transferred to a permanent file system based in the islands and carried on each trip. Secretarial help should be made available to maintain and update this record system.

8. at Utirik, arrange to have one of the metal AEC buildings converted into a new dispensary.

9. at Rongelap, allow the people to use the tractor stored there to help clear the island and general island improvements.

10. provide adequate food so that when people are removed from their activities for examinations they and their families will be fed. Similarly, when a patient is returned to the United States, provide food assistance for the family left behind.

1012212

11. patients returning to the U. S. should always be accompanied by an interpreter for the entire journey, preferrably one of the same sex. Passports and other immigration documents arranged prior to departure.

12. be more culturally aware - do not set time constraints, allow a meeting to begin when all people have assembled. Do not refuse to meet with the people for any reason.

13. during the examination, have a Marshallese nurse in the room for direct patient doctor communication. It would provide a more thorough examination and the patient feels in this way he/she has "spoken" with the doctor.

14. given assurances to the members of the control group that once included in the group they will receive the same type of care as the exposed population. Even if control members move, follow up arrangements are to be made.

1012213