Results of a Community Health Assessment in the Republic of the Marshall Islands

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In 2003 and 2004, Pacific Resources for Education and Learning (PREL) partnered with a group of health and social service providers in the Republic of the Marshall Islands (RMI) to carry out a community assessment survey to gather information about health priority issues in the RMI. The survey, funded by a National Library of Medicine (NLM) Planning Grant, is a rich source of data about health in the RMI. This article presents the results of the survey.

BACKGROUND INFORMATION

The RMI consists of 29 major atolls and 5 islands in more than 2 million square kilometers of the Pacific Ocean. The total land area of RMI is only 179 square kilometers. Approximately 50% of the population lives in the capital, Majuro, with another 20% in Ebeye. The RMI has some of the world's highest population densities and growth. There are inadequate provisions of safe water and sanitation; decreasing financial resources, high population growth, and overcrowding in urban areas are also evident. According to the World Health Organization (WHO), "the people of the Republic of the Marshall Islands continue to suffer from the infectious diseases usually associated with rapidly growing, low income countries, while at the same time they are increasingly being affected by the negative effects of a modern lifestyle." Additionally, WHO maintains, "teenage pregnancy, suicide, and alcoholism are at unacceptable levels" (2000).

These tiny islands played a significant role in U.S. history and to this day the Marshallese are still paying the price for nuclear testing. Because of the testing in 1946, a significant part of the land became uninhabitable, and there is additional land not accessible to the Marshallese because it is now used for U.S. military purposes. The lives of numerous Marshallese are still affected. Many continue to be traumatized by the loss of land: "It was as if my mother and father left me," articulated a Bikinian elder, who shared his feelings about the moment his island disintegrated. Others fear ill health and live with the sentiment that they have been made into guinea pigs (Simon, 1997). Clearly, there have been lifestyle changes that affect the population in numerous ways. The Marshallese are very dependant on imported foods. The consumption of imported foods high in sugar and fat has led to adult obesity and a rise in lifestyle diseases.

TARGET POPULATION

This survey targeted teenage parents in the RMI. Teenage parents are vulnerable, and they have limited education and inadequate economic and social support structures to help them raise their children. Teen parents comprise a large percentage of the RMI population. About 54% of the population is under the age of 20, and the median age is 19.3. About 95% of the total population is below the poverty level. The general fertility rate is 2.6%, while the adolescent pregnancy rate is 96.7 per 1,000 adolescent women. Of women aged 15–44, 62.5% use birth control (U.S. Department of Health and Human

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Services, Office on Women's Health, n.d.). The birth rate in RMI is 33.88 births per 1,000 people, compared to the U.S. rate of 14.13 births per 1,000 people (2004 est.) (Central Intelligence Agency, 2004).

In the *Marianas Variety* on August 12, 2002, Eugenia Samuel of the Pohnpei-based Micronesian Seminar is quoted as saying, "According to one of the administrators at Pohnpei's public high school, five or six girls get pregnant every year. More surprising than this is that just as many elementary school girls as high school students are getting pregnant each year." The same article states that RMI and Pohnpei have high percentages of teenage mothers; 19% of all births from 1996–2000 in these islands were to teens (Johnson, 2002).

Public health issues in the RMI are extremely taxing for reasons beyond the challenges of the health issues themselves. The range of issues varies from hygiene to deadly cancers. Getting information to the outlying atolls is difficult, and the general population is not well informed about health issues. Access to information is sporadic, and because of low English literacy rates, printed matter is not an effective way of disseminating information, except to teachers and health educators. Motivation for health is yet another elusive challenge. The challenges of getting and maintaining reliable data add to the complexity. One of the most positive steps toward solving these problems is coordination between agencies and an agreement to work toward improving health outcomes by working more collaboratively.

SURVEY ADMINISTRATION

A group of health and social service providers called the Healthy Information Partnership (HIP) collaborated in carrying out the survey. The survey was developed taking into account priorities previously identified by local health and education authorities as well as the national health priorities of the WHO. It was designed specifically for teachers and parents because of the potential to expand school health and to identify concerns that affect families and children. The survey addressed these areas of interest:

- Delivery of health services and access to care
- The cultural element in health, beliefs, and use of local medicine
- Health education methods and delivery of health information
- The role of various agencies and groups in health promotion
- Health challenges and current health practices
- Current knowledge of health and prevention

Women United Together in the Marshall Islands (WUTMI), a national nonprofit umbrella women's organization, took a lead role in working with various groups and inviting them to participate in a planning effort. WUTMI's goal is to "encourage and ensure activities that preserve and strengthen the values of traditional Marshallese culture as well as addressing the realities of modern life in the islands" (Global Village Energy Partnership, 2004). WUTMI, along with the RMI Ministry of Education (MOE), played a key role in the administration of the community health survey and in collecting information that would give the planning group a starting point.

The survey consisted of 64 items (including 5 items focused on demographic data) with multiple response options (true/false, multiple choice, and several Likert-type scales), with additional space for open-ended responses as needed. Attempts to shorten the survey were made, but the stakeholders wanted all the information and decided that they did not want to delete any of the items. The surveys were written in English. The survey administrators determined that translation would make the survey more confusing because of specific terminology, so translations were provided orally as needed.

In February and March 2004, approximately 275 surveys were administered to teachers and parents. There was a high response rate—248 surveys were returned and all were usable—largely due to the personal contact. WUTMI was able to send interviewers to the outer islands at no cost to the project. Because they conducted face-to-face interviews with the parents, information was obtained that would be otherwise very difficult to gather. Surveys were administered orally to parents, with translation, and teachers were generally given the written version of the survey. Response time averaged 1–2 hours. Judging by the response to the anecdotal sections, the responses were sincere and thorough.

RESPONDENTS

Of the 248 returned surveys, 154 were from teachers (62%) and 94 were from parents (38%). Respondents came from 19 islands in RMI, with 57% from the urban areas of Majuro and Ebeye, and 43% from rural areas (all other islands). A majority of teachers (68%) were from these two urban areas, while the parents were more evenly divided: 31% from Ebeye, 15% from Ujae, 14% from Wotje, and only 9% from Majuro.

Overall, the respondents were 60% female and 40% male; however, a slight minority (45%) of the teachers were female while a large majority of parents (83%) were female. Age breakdowns of parents and teachers were very similar. Of the respondents as a group, 30% were aged 30–39, 24% were aged 40–49, and 22% were under 30.

Teachers were asked which grade(s) they taught, and parents were asked which grade(s) their children attended. The largest percentages of teachers and parents taught or had children attending grade 8 (23% and 27%, respectively). Only small percentages of teachers taught high school: 2% taught

grade 9 and 1% taught each of grades 10–12. Parent responses were more evenly divided: at least 11% had children attending each grade.

Teachers and parents were asked how many children they had. This question did not refer to students in a teacher's class, but to the number of children in each respondent's family. The 248 respondents had a total of 947 children. Teachers averaged fewer children than parents, with 62% of teachers having 4 children or less, while 48% of parents had 4 children or less.

ANALYSIS AND LIMITATIONS

The analysis follows the order of the questionnaire. No tables are given for questions with yes/no or true/false responses.

One of the limitations of the survey is that it is not representative of all ages, roles, genders, and other demographic variables in the RMI population. The high percentage of teacher responses could skew the results. One could assume that the teachers represent a more informed group, so the reported knowledge of health information may be, in actuality, lower than what is represented here.

The primary barriers that hampered the survey were distance, both between Honolulu and the RMI and within the RMI itself, and the lack of resources to convene partners regularly face-to-face during the survey period.

RESULTS

Questions were asked with respect to medical help seeking practices; use of local medicine; access to services; methods for promoting health; attitudes toward food choices/community norms about foods; breastfeeding; family planning; parenting; suicide, drugs, and alcohol; and teachers and health.

Medical Help Seeking Practices

When asked how often they visit the doctor, 80% of respondents said they visit a doctor if they are sick, 46% said they visit the doctor only if they are seriously ill, and 25% said they visit the doctor regularly for checkups (multiple responses were permitted). Only 10% of parents and 3% of teachers said they do not visit the doctor at all.

Several questions were asked about respondents' communication with health professionals. Responses are summarized in Table 1. Overall, respondents seemed satisfied with their communication with health professionals, though 44% of parents and 31% of teachers felt that it was sometimes difficult to understand instructions given by their doctors. The number of parent respondents for these questions varied between 49 and 91, while the number of teacher respondents was approximately 150 for each question.

TABLE 1
Communication With Health Professionals

Statement	Agreed		
	Teachers	Parents	Both
My doctor listens carefully to me.	88%	90%	88%
My doctor spends enough time with me when I visit.	75%	80%	76%
It is easy for me to get a follow-up appointment.	72%	86%	76%
I would prefer a local (Marshallese) doctor, nurse, or health professional.	75%	78%	76%
It is sometimes difficult for me to understand the instructions I get from the doctor.	31%	44%	36%
The doctor does not understand my problem.	22%	30%	24%

Use of Local Medicine

Responses on use of local medicine are presented in Table 2. An overwhelming majority (96% of teachers and 94% of parents) said they used both Marshallese and Western medicine. The rest use either exclusively Western or exclusively Marshallese medicine. These questions were answered by approximately 150 teacher respondents and between 77 and 93 parent respondents.

TABLE 2
Use of Local Medicine

Statement	Agreed		
	Teachers	Parents	Both
Sometimes I use local medicine, and sometimes I visit the doctor.	96%	94%	95%
I do not use local medicine.	3%	2%	3%
I use local medicine and never visit the doctor.	1%	3%	2%

Note. Percentages do not add up to 100% due to rounding.

Table 3 shows where respondents got their local medicine. Teachers got local medicine from more numerous

sources than parents did (multiple responses were permitted). The most popular source for both teachers (84%) and parents (70%) was family members.

TABLE 3
Sources of Local Medicine

Where Do You Get Your Local Medicine?	Teachers	Parents	Both
Family member	84%	70%	79%
Local healer	58%	29%	48%
Family healer	50%	40%	47%
Midwife	26%	41%	31%
Number of respondents	154	73	227

Note. Percentages do not add up to 100% due to multiple responses.

The next question asked respondents in which situations they preferred local medicine. Pregnancy was the situation chosen by the largest number of both teachers (60%) and parents (66%). Other common answers were body ache (47% of teachers and 33% of parents), internal injury (38% of teachers and 53% of parents), and cancer (42% of teachers and 45% of parents). Multiple responses were permitted.

TABLE 4
Situations in Which Local Medicine is Preferred

Local Medicine is Better Than the Doctor for:	Teachers	Parents	Both
Pregnancy	60%	66%	62%
Internal injury	38%	53%	43%
Cancer	42%	45%	43%
Body ache	47%	33%	43%
Stomach problems	46%	27%	40%
Diabetes	40%	33%	37%
Headache	32%	29%	31%
Bruises	25%	42%	30%
Number of respondents	154	73	227

Note. Percentages do not add up to 100% due to multiple responses.

Access to Services

The next section contained several questions about access to medical services. Majorities of each group (82% of teachers, 76% of parents, 80% of the combined group) said they could get to a doctor when they needed to. A follow-up question asked which factors limited their access to services. The most common responses were "Too expensive," (68%); followed by "Too far away/hard to get transportation," (60%); and "Don't have time," (45%).

Table 5 reflects responses to the next question, which asked how many times in the past year respondents or their families had seen various health providers. Doctors were seen most often (an average of 2.6 times for respondents, 2.2 times for their spouses, and 3.5 times for their children), followed by health assistants in dispensaries and local medical practitioners. The number of respondents for these questions varied from 106 to 179.

TABLE 5
Number of Visits to Various Health Providers in Past Year

	Me	My spouse (if married)	Children
Doctor	2.6	2.2	3.5
Health assistant in dispensary	2.0	1.5	1.5
Local medical practitioner	1.8	1.4	1.6
Nurse	0.9	1.0	1.9
Dentist	0.9	0.8	1.2
Midwife	0.4	0.3	0.1

The next question asked respondents' opinions about who could best deliver appropriate and effective health messages. As shown in Table 6, doctor/nurse was chosen by 71% of both teachers and parents. Parents (77%) and teachers (66%) chose the Ministry of Health next most often, for a combined total of 69%.

TABLE 6
Who Can Best Deliver Health Messages

Response	Teachers	Parents	Both
Doctor/nurse	71%	71%	71%
Ministry of Health	66%	77%	69%
Health assistant	61%	69%	63%
Teacher	53%	33%	48%
Church	44%	33%	41%
Number of respondents	154	52	206

Note. Percentages do not add up to 100% due to multiple responses.

Two questions asked about the Youth to Youth in Health (YYIH) or Jodrikdrik ñan Jodrikdrik ilo Ejmour program. As reflected in Table 7, nearly all teachers (98%) and all parents had heard of the program, and most (79% of teachers and 85% of parents) thought that the program was working well. The first question was answered by 148 teachers and 51 parents, and the second question was answered by 114 teachers and 40 parents.

TABLE 7
Familiarity With Youth to Youth in Health (Jodrikdrik ñan Jodrikdrik ilo Ejmour) Program

Question	Teachers	Parents	Both
Have you heard about the Youth to Youth in Health (Jodrikdrik ñan Jodrikdrik ilo Ejmour) program?	98%	100%	99%
If YES, do you think that this program is working well?	80%	85%	81%

Suggestions for improvement of the YYIH program were as follows:

- Get assistance/training from those with appropriate expertise.
- Provide outreach to outer islands including visiting all villages.
- Educate about common diseases, especially incurables.
- Don't just sing and dance with information, but apply it to daily living (be role models).
- Have more workshops for teens.
- Keep strong traditional background and religion.

Methods for Promoting Health

The next section contained questions about methods of disseminating health information and about knowledge and beliefs related to health. One question asked which forms of communication were the most effective for learning new health information. Table 8 shows that all forms of communication were deemed "most helpful" or "helpful/sufficient" by most respondents. Face-to-face communication was rated "most helpful" by 80% of respondents, while brochures and flyers were rated "not helpful" by 9% and another 17% said they were not sure. Between 183 and 225 parents and teachers answered each of these questions.

Table 9 reflects the responses to a question asking what sources would be most helpful in addressing health issues. Workshops/classes/clinics were chosen by 82% of teachers and 81% of parents, and the Ministry of Health was chosen by 76% of teachers and 77% of parents (multiple responses were permitted). Teachers chose school health and church groups more often than parents did (73% vs. 52% and 58% vs. 38%, respectively), while parents chose organized events more often than teachers did (63% vs. 45%).

TABLE 8
Best Ways to Learn New Health Information

The Best Way for Me to Learn New Health Information Is Via:				
	Not helpful to me at all	Helpful/ suffi-cient	Most helpful	Don't know
Personal visit, face-to-face information	4%	13%	80%	4%
Class/workshop	3%	21%	70%	6%
Doctor/nurse	5%	25%	68%	2%
Radio	5%	29%	63%	3%
Health fair	6%	30%	59%	5%
Poster	5%	40%	51%	5%
Video	6%	32%	52%	10%
TV	8%	27%	52%	13%
Brochure, flyer	9%	35%	39%	17%

Note. Percentages do not add up to 100% due to rounding.

TABLE 9
What Would Be Most Helpful in Addressing Health Issues?

Responses	Teachers	Parents	Both
Workshops/classes/clinics	82%	81%	82%
Ministry of Health	76%	77%	76%
More information available on radio, TV	71%	62%	69%
School health	73%	52%	68%
Youth to Youth in Health (Jodrikdrik …)	66%	63%	65%
More information available in print	62%	63%	63%
Community groups	65%	54%	62%
Church groups	58%	38%	53%
Organized events	45%	63%	50%
Peer support groups	51%	37%	47%
Number of respondents	154	52	206

Note. Percentages do not add up to 100% due to multiple responses.

The next question was about whether the church should play a role in addressing health issues. Majorities of all groups (83% of parents, 69% of teachers, and 73% of the combined group) felt that it should. With respect to a similar question regarding women's groups, large majorities (86% of teachers, 94% of parents, and 88% of the combined group) felt they should play a role in addressing health issues. Anecdotal responses from the respondents indicate some ways this could happen:

- Mini workshops for young mothers and educating teenage girls about diseases
- Group discussion of family health problems
- Woman-to-woman discussions

However, participants noted that with Marshallese customs, it is difficult for women to expose their illnesses. Respondents also suggested that women's groups could address the following areas of concern:

- Budgeting and malnutrition, including how to cook healthy food
- Workshops on women's lives, including how to plant foods and clean community areas
- Walking and exercising
- Use of island foods
- Family planning
- Grooming, including teaching and practicing proper hygiene at home

In the next question, respondents were asked to indicate the barriers to good health in their communities. The responses are shown in Table 10. The most common choices among teachers (between 60% and 65% each) were customs, knowledge of health issues, living conditions, and lifestyle. Parents also rated living conditions (62%), knowledge of health issues (56%), and lifestyle (56%) as important barriers, but notably fewer parents chose customs (35%). Instead, their next most common choice was lack of effective services, also at 56%.

TABLE 10
Barriers to Health

Responses	Teachers	Parents	Both
Living conditions (water, housing, etc.)	62%	62%	62%
Knowledge of health issues	64%	56%	62%
Lifestyle (exercise, smoking, etc.)	60%	56%	59%
Customs	65%	35%	57%
Motivation for being healthy	49%	42%	48%
Beliefs	53%	27%	46%
Access to care (transportation, etc.)	44%	40%	43%
Services not effective	37%	56%	42%
Policies (government, rules, etc.)	37%	31%	35%
Number of respondents	154	52	206

Note. Percentages do not add up to 100% due to multiple responses.

As is indicated in Table 11, when asked who they felt was most responsible for their health, a large number of both teachers and parents (90% and 89%, respectively) indicated that they felt responsible for their own health. The next most common choices were family (51% of teachers and 35% of parents) and doctor (44% of teachers and 34% of parents).

TABLE 11
Responsibility for Health

Response	Teachers	Parents	Both
I am responsible for my health	90%	89%	90%
My family	51%	35%	45%
My doctor	44%	34%	40%
School	23%	4%	16%
Government	38%	14%	29%
Number of respondents	154	94	248

Note. Percentages do not add up to 100% due to multiple responses.

The next question asked who was most responsible for teaching about health. As shown in Table 12, 71% of teachers felt that they had the primary responsibility, followed closely by health professionals (70%). However, only 37% (the lowest number) of parents felt that teachers had the primary responsibility; they placed greatest responsibility with health professionals (56%).

TABLE 12
Primary Responsibility for Teaching About Health

Response	Teachers	Parents	Both
Family	68%	48%	63%
Government, Ministry of Health	66%	44%	61%
Health professionals – doctors, nurses, etc.	70%	56%	67%
Other school health/health specialist	68%	40%	61%
Teachers	71%	37%	62%
Youth to Youth in Health (Jodrikdrik…)	57%	48%	55%
Number of respondents	154	52	206

Note. Percentages do not add up to 100% due to multiple responses.

In answer to the next question, 100% of parents and 99% of teachers agreed that the community should be involved in improving health. Nonetheless, 90% of parents and 87% of teachers agreed that attitudes and cultural beliefs could sometimes be a challenge in promoting health.

Large majorities (78% of teachers and 84% of parents) said that they or someone in their family had diabetes. When asked to rate their knowledge of diabetes and how to prevent it, the top choice of teachers, at 46%, was "I know a lot," while the top choice of parents, at 59%, was "Know a little" (see Table 13). Only 23% of parents felt that they knew a lot about diabetes and how to prevent it.

TABLE 13
Knowledge of Diabetes and How to Prevent It

I Know What Diabetes Is and How to Prevent it:			
	Teachers	Parents	Both
I know a lot	46%	23%	37%
Know a little	42%	59%	49%
Don't know much	11%	18%	14%
Number of respondents	151	92	243

Note. Percentages do not add up to 100% due to rounding.

Table 14 shows answers to a question asking respondents to rate their knowledge about nutrition. Answers were very similar to those about diabetes.

TABLE 14
Knowledge About Nutrition

How Would You Rate Your Knowledge of Nutrition:			
	Teachers	Parents	Both
I know a lot about nutrition	46%	20%	36%
Know a little	42%	54%	47%
Don't know much	12%	26%	17%
Number of respondents	151	92	243

Attitudes Toward Food Choices/Community Norms About Foods

This section focused on food and its relation to health. The first question asked how much respondents thought that people in their communities knew about healthy lifestyles, including eating well, exercising, and not smoking. As shown in Table 15, most respondents (60% of teachers and 69% of parents) thought that people in their communities knew "a little."

TABLE 15
Community's Knowledge About Healthy Lifestyles

How Much Do You Think People in Your Community Know About Healthy Lifestyles (Eating Well, Exercising, Not Smoking)?			
	Teachers	Parents	Both
They know a lot about healthy lifestyles	14%	11%	13%
They know a little about healthy lifestyles	60%	69%	64%
They don't know much about healthy lifestyles	26%	19%	24%
Number of respondents	148	88	236

Note. Percentages do not add up to 100% due to rounding.

The next questions asked how often respondents ate or drank certain foods. The answers are summarized in Table 16. Rice, clean water, and fish were most popular, eaten "a lot" by 93%, 83%, and 68% of respondents, respectively. Between 169 and 199 teachers and parents responded to each of these questions.

TABLE 16
Frequency of Consumption of Certain Foods

	Never	Sometimes	A lot
Rice	1%	6%	93%
Clean water	2%	15%	83%
Fish	1%	31%	68%
Fruit	1%	60%	39%
Vegetables	5%	62%	33%
Soda	5%	74%	21%
Spam	7%	80%	14%
Chips	7%	81%	13%
Taro	27%	60%	13%

Note. Percentages do not add up to 100% due to rounding.

In answer to the question that followed, 78% of teachers and 57% of parents (69% of the combined group) said they believed that they knew how to get enough vitamin A in their diets.

Table 17 shows the answers to a question about how people chose which foods to eat. The price of food rated highest for both teachers and parents, with 66% and 77%, respectively, and cultural norms was the least important factor, with 33% and 25%, respectively.

TABLE 17
Factors Influencing Choice of Foods

Response	Teachers	Parents	Both
Price of food	66%	77%	68%
What is available	64%	71%	66%
What is good for me	65%	56%	63%
Easy to cook	56%	77%	62%
What family is used to eating	59%	63%	60%
Taste	52%	63%	55%
Cultural norms	33%	25%	31%
Number of respondents	154	52	206

Note. Percentages do not add up to 100% due to multiple responses.

Next, respondents were asked how likely it was that certain factors would cause them to eat better. The responses are summarized in Table 18. The most likely factors were lower price of healthy food and learning to grow your own vegetables, chosen as "very likely" by 66% and 64% of respondents, respectively. The least important factors were store demonstrations and being told about eating better by friends/peers, which were chosen as "not likely" by 25% and 18%, respectively. Between 197 and 225 teachers and parents answered each of these questions.

TABLE 18
Likelihood Certain Factors Would Cause Respondents to Eat Better

	Not likely, doesn't matter	A little likely	Very likely
Lower price of healthy food	13%	21%	66%
Learning to grow your own vegetables	12%	24%	64%
Taking a health class about lifestyle and nutrition	12%	26%	62%
Getting healthy recipes	7%	35%	57%
Doctor telling you to eat better because of your health	8%	35%	57%
Friend/peer telling you about eating better	18%	47%	35%
Store demonstrations	25%	46%	29%

Note. Percentages do not add up to 100% due to rounding.

The next set of questions focused on disease prevention. In answer to the first question, only 30% of teachers and 34% of parents said that they or someone in their families had had a cholesterol screening. Table 19 shows respondents' answers to questions about their knowledge of certain diseases and how to prevent them. Teachers rated their knowledge higher than parents did. STD/HIV/AIDS was the disease about which both teachers and parents most often said they knew "a lot." However, while this maximum percentage was 69% for teacher respondents, it was only 34% for parent respondents. Approximately 147 teachers and 92 parents answered each of these questions.

When asked how often they believe young people practice certain healthy behaviors (like brushing and flossing teeth and getting enough sleep), a majority of respondents answered "every day" for all but one of the behaviors, as shown in Table 20. The exception was flossing teeth, which was ranked "every day" by only 39% of respondents, and was ranked "rarely" or "never" by 33%. Approximately 137 teachers and 48 parents answered each of these questions.

Table 21 shows the responses to a question about where respondents get clean water. The majority (78% of teachers and 72% of parents) indicated that they get clean water from catchments.

TABLE 19
Level of Knowledge About Certain Diseases and How to Prevent Them

Disease	Teachers			Parents			Both		
	Not much	A little	A lot	Not much	A little	A lot	Not much	A little	A lot
STD/HIV/AIDS	5%	25%	69%	28%	38%	34%	14%	30%	55%
Conjunctivitis	19%	28%	52%	28%	42%	29%	23%	34%	44%
Cholera	15%	41%	43%	42%	34%	24%	25%	39%	36%
Leprosy	19%	36%	45%	49%	34%	17%	30%	35%	34%
Scabies	33%	37%	31%	26%	41%	33%	30%	38%	31%
Tuberculosis	25%	38%	37%	43%	39%	17%	32%	38%	30%
High cholesterol	31%	38%	30%	46%	42%	12%	37%	40%	23%
Dengue fever	22%	46%	31%	56%	33%	11%	36%	41%	23%

Note. Percentages do not add up to 100% due to rounding.

TABLE 20
How Often Respondents Believe Young People Practice Certain Behaviors

	Never	Rarely	Once a week	Every other day	Every day
Take a bath	0%	2%	2%	14%	81%
Drink clean water	2%	8%	2%	10%	79%
Wash hands before eating	1%	8%	1%	12%	78%
Brush teeth	1%	7%	4%	15%	74%
Get enough sleep	2%	13%	3%	19%	63%
Floss teeth	17%	16%	6%	21%	39%

Note. Percentages do not add up to 100% due to rounding.

TABLE 21
Sources of Clean Water

	Teachers	Parents	Both
Water catchments	78%	72%	76%
City running water	14%	26%	17%
Well water	8%	2%	7%
Number of respondents	145	43	188

The next question asked what respondents were doing about their weight. The most common answer, chosen by 39% of teachers and 41% of parents, was "trying to lose weight," and the next most popular was "not trying to do anything about my weight." Results are shown in Table 22.

TABLE 22
What Respondents Are Doing About Their Weight

Response	Teachers	Parents	Both
Trying to lose weight	39%	41%	39%
I am not trying to do anything about my weight	28%	35%	30%
Trying to keep from gaining any more	26%	18%	24%
Trying to gain more weight	7%	6%	7%
Number of respondents	148	51	199

The following questions asked on how many of the last 14 days respondents had done at least 20 minutes of light exercise like walking, and 20 minutes of hard exercise like playing basketball or jogging. As shown in Table 23, the largest number of parents answered "none" for both hard and light exercise (48% and 33%, respectively), while the largest number of teachers answered "1 to 2 days" for both hard and light exercise (31% and 34%, respectively).

TABLE 23
Number of Days in the Last Two Weeks
Respondents Have Exercised

	Response	Teachers	Parents	Both
20 Minutes of Hard Exercise	None	28%	48%	33%
	1 or 2 days	31%	28%	30%
	3 to 5 days	27%	18%	25%
	6 to 8 days	4%	6%	5%
	9 or more days	10%	0%	7%
	Number of respondents	146	50	196
20 Minutes of Light Exercise	None	15%	33%	20%
	1 or 2 days	34%	16%	29%
	3 to 5 days	25%	18%	23%
	6 to 8 days	12%	10%	12%
	9 or more days	14%	24%	17%
	Number of respondents	146	51	197

Note. Percentages do not add up to 100% due to rounding.

Parenting

The next section focused on parenting. Large majorities were supportive of both parenting classes (97% of 127 teacher respondents and 100% of 50 parent respondents) and breastfeeding (98% of 131 teacher respondents and 91% of 70 parent respondents). On the breastfeeding question, men were asked to respond for their wives.

Most parents felt at ease talking to their children about family planning, with 88% of the 144 teacher respondents and 71% of the 51 parent respondents indicating that they were comfortable discussing it with their children.

When asked to choose the most important factor in preventing teen pregnancy, 45% of teachers and 32% of parents chose "family/parents talking to children." Other top choices were "family planning, health clinics," picked by 32% of teachers and 32% of parents, and "self discipline," chosen by 8% of teachers and 32% of parents. The results are shown in Table 24.

TABLE 24
Most Important Factor in Preventing Teen Pregnancy

Response	Teachers	Parents	Both
Family/parents talking to children	45%	32%	41%
Family planning, health clinics	32%	32%	32%
Self discipline	8%	32%	16%
Health education in school	9%	0%	6%
Church	3%	3%	3%
Community norms and expectations	3%	0%	2%
Peer education	0%	3%	1%
Other	0%	0%	0%
Number of respondents	77	38	115

Note. Percentages do not add up to 100% due to rounding.

Suicide, Drugs, and Alcohol

The next section focused on prevention of suicide, and drug and alcohol use. In answer to a question about talking to children, 92% of 123 teacher respondents and 88% of 48 parent respondents said that they talked to their children about drugs and alcohol. Table 25 shows responses to a question asking respondents to choose the most important factor in preventing suicide. The top choice was "family/parents talking to children," selected by 39% of teachers and 38% of parents, followed by "self discipline," which was chosen by 18% of teachers and 31% of parents. "Church" was chosen by 16% of teachers and 10% of parents.

TABLE 25
Most Important Factor in Preventing Suicide

Response	Teachers	Parents	Both
Family/parents talking to children	39%	38%	39%
Self discipline	18%	31%	22%
Church	16%	10%	14%
Health education in school	13%	10%	12%
Peer education	5%	10%	7%
Government, Ministry of Health, clinics	8%	0%	5%
Community norms and expectations	1%	2%	2%
Other	0%	0%	0%
Number of respondents	79	42	121

Note. Percentages do not add up to 100% due to rounding.

The next question asked respondents to choose the most important factor in preventing the use of alcohol, tobacco, and other drugs. Once again, the most popular choice was "family/parents talking to children," picked by 46% of teachers and 55% of parents. "Self discipline" was chosen by 16% of teachers and 18% of parents, and "Church" was chosen by 14% of teachers and 15% of parents. Results are shown in Table 26.

TABLE 26
Most Important Factor in Preventing Use of Alcohol, Tobacco, and Other Drugs

Response	Teachers	Parents	Both
Family/parents talking to children	46%	55%	49%
Self discipline	16%	18%	17%
Church	14%	15%	14%
Health education in school	10%	3%	8%
Government, Ministry of Health, clinics	4%	10%	6%
Community norms and expectations	9%	0%	6%
Peer education	1%	0%	1%
Other	0%	0%	0%
Number of respondents	79	40	119

Note. Percentages do not add up to 100% due to rounding.

Teachers and Health

The last question asked respondents if they agreed with a list of statements about the teaching of health in the schools. Parents only responded to the first 3 of the 11 statements as the rest concerned teaching. As is shown in Table 27, large majorities of respondents said that health is an important subject to be taught in schools, that they were comfortable teaching it, and that they knew how to get more information about it. However, only 32% thought they had appropriate materials for teaching health, and only 27% thought they had culturally appropriate health materials. Approximately 147 teachers responded to each statement and approximately 48 parents responded to the first three statements.

TABLE 27
Teachers and Health

Statement	Agreed	
	Teacher	Parent
Health is an important subject to teach in school.	97%	100%
I would like to learn more about health.	99%	83%
School should be the main place to learn about health.	72%	94%
I would be comfortable teaching health in school.	92%	N/A
I know where to go if I want more information about health or where to get materials to teach about health.	85%	N/A
I know enough about health to be able to teach it well.	71%	N/A
I have enough time at school to teach health.	67%	N/A
Teaching health is a priority at my school.	67%	N/A
I know very little about health.	39%	N/A
I have appropriate materials to use to teach health.	32%	N/A
I have health materials that are culturally appropriate.	27%	N/A

PLANNING INSTITUTE

The results of the survey were shared at a three-day planning institute held at the WUTMI office on April 16–19, 2004. Participating agencies were WUTMI, the Ministry of Health (MOH), the MOE, YYIH, Alele Museum and Library, College of the Marshall Islands (CMI), the Ministry of Internal Affairs Mobile Team, and PREL. A total of 25 people participated. The planning institute was highly successful and strengthened the working relationship between members of the HIP consortium. In addition, the consortium expanded as new members heard about the institute and sought to participate. YYIH and the Ministry of Internal Affairs Mobile Team later requested to join as members.

The agenda included time to share data from the survey and a chance for participants to respond to the data with their own observations and experiences in the form of small group work and discussion. The questions they responded to were as follows:

- What does this data tell us?
- What other data might we need?
- What are the challenges and opportunities associated with this issue?

Participants in the planning institute derived a number of implications from the survey results.

Future Work

- There is a need to expand and improve youth-to-youth contact, the role of the church and women (and possibly leaders), and youth-to-youth training.
- There are avenues not yet fully explored, such as how to involve church, community, and local leaders; and how to engage families.
- It appears that communities do not fully understand health issues and are not equipped to address them. People would like to be involved but do not know how.
- The role of the church has expanded; the church is sometimes involved in social issues.
- Role distinction is stronger in outer island communities than in urban communities. This poses a challenge for collaborative work across programs or role groups (e.g., health assistant, mayor, teacher, police, church, women's group).
- Communities need more coordination and collaboration among nongovernmental organizations (NGOs) and government organizations.
- A question that needs to be answered is: "How do teen parents teach their kids when they are kids themselves?"
- The mothers seem to be more involved in these issues than the fathers. How involved are fathers with their children's upbringing? Would it be helpful to collect data on teen pregnancy, whether teen parents are single, and how much fathers are involved in raising the children?
- Parenting training is a significant need.
- There seems to be a fragmentation of services; it would be helpful to mobilize existing services. Work in the urban areas might have a ripple effect on outer islands.
- Misinformation is an issue. Relatives and friends share information that is often incorrect.
- People are aware of the issues but do not have deeper content knowledge to take helpful measures.
- Lifestyle health issues, including diabetes and personal hygiene, need more focused attention.

Health Behaviors

- Rural people do more physical activity than urban people, but there is a general lack of activity throughout the surveyed areas.
- People eat what they can afford, and what is available. There are many unhealthy foods (e.g., potato chips, soda, sugary foods) available in the stores and not much variety of fresh fruits and vegetables.
- Most people do not fully understand issues surrounding lifestyles, and more health education is needed. Health terms (e.g., cholesterol) are generally not well understood. People might be superficially aware of the health issues, but they do not understand the implications of their lifestyle choices.
- Exercise does not just reduce weight, it also strengthens bones and maintains health. It is important to understand eating habits and how they affect health, but the message should be a positive one about exercising more and not drinking or smoking. Perceptions about being fat, especially for women, need to change.
- Not many health resources are available. Health is a sensitive issue, so the need for culturally appropriate material is high.
- The school timetable might not allow adequate time for health education.
- Health is taught inconsistently; some teachers teach it if they are comfortable with it, but others do not teach it at all.
- The parents who were surveyed want to learn more about health issues. Parent involvement in teaching health should be expected – it should not be just the teachers' responsibility. Hygienic practices need to start at home (e.g., taking regular baths, brushing teeth, and washing hands).

PRIORITIES FOR FUTURE PROJECTS

Participants were asked to prioritize the findings, based on their experience with the issues and what they learned in the data summary workgroups. Interestingly, each of the groups identified similar priorities. All three groups collaborated and came up with the following list of top five concerns:

1) Family planning, family life education, and more opportunities for youth
2) Lifestyle changes (to reduce diabetes, heart disease, sexually transmitted diseases, HIV, etc.) and preventive practices such as nutrition and physical activity
3) Hygiene home curriculum for parents
4) Strengthening health education in school; building capacity through teacher training, workshops, coordination of resources, and materials development
5) Cultural values that promote health and strengthen health education; examining advantages and disadvantages to identify positive cultural values that promote health; manuals for service providers

The planning group concluded that the general population is not well informed about health issues and that there must be a concerted effort to disseminate information. Certain topics, such as lifestyle, hygiene, and parenting, were of serious concern. Since many of the health issues stem from the home environment, the group decided that parents should be the prime targets for the distribution of health materials. Parents are the first step to building healthy habits and lifestyles. The group also agreed that it would be desirable to work through the schools, but it is challenging to get time set aside in schools. Parents would be reached via the Parent Teacher Association (PTA), as well as through other venues that will be explored by the HIP.

The survey revealed that personal contact—either one-on-one or workshops—is the most effective means of reaching this group. Radio or video would be a second choice due to the difficulty of reaching the outer islands and the minimal resources for outreach efforts. However, the capacity to provide parenting education needs to be bolstered in two ways: materials development and training for the trainers.

The planning group proposed to build upon existing resources and processes to tackle this challenge as follows:

1) Use existing materials and adapt them accordingly.
2) Develop materials in areas that have not yet been addressed.
3) Document and store materials so others can access the information.
4) Train others in the use of these materials to expand outreach.

The participants agreed among themselves to take on various responsibilities. YYIH is a group that is already using an interesting format (live skits and dramatization) for disseminating health information, but their resources are limited in staffing to do outreach and materials to address current health issues. The MOH will provide the expertise to ensure that the health content areas are covered accurately. The Alele Museum and Library and the Ministry of Internal Affairs will review the materials for cultural appropriateness and distribute them to the communities. An MOE adult education specialist will review the materials for age appropriateness. The evaluator will develop an instrument for a focus group to use to test materials for effectiveness. The library will ensure that the materials are available and accessible.

The RMI faces unique challenges in improving the health of its citizens, including a population divided between densely populated urban centers and small, isolated outlying atolls. The RMI health survey and planning institute resulted not only in valuable data, but also in recommendations aimed at overcoming these specific challenges. Even more importantly, the experience of conducting the survey and planning institute has helped build the relationships through which the recommendations may be implemented.

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