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Final Report

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Job Classification	:	Filariasis Control
Name of Host Organization	:	Ministry of Health
Work Place	:	Filariasis Control Unit
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稲積瑞月

Mizuki Inazumi
Japan Overseas Cooperation Volunteer (JOCV)

Final Report

1. INTRODUCTION

I've been working with the Filariasis Control Unit, Ministry of Health for the past two years as a JOCV (Japan Overseas Cooperation Volunteers). Samoa is one of the endemic countries with Lymphatic Filariasis, and it is participating in the Pacific programme for the Elimination of Lymphatic Filariasis (PacELF).

At first, the Ministry of Health made a request for my assistance with data analysis using the computer and also to work with the Filariasis team. I was involved with all the activities of the Filariasis programme and assisted in conducting them. It was very hard for our team to practice along the PacELF programme because of the lack of quality and also the quantity of staff. This meant there was only a few staff who had experience and knowledge of Lymphatic Filariasis. However, our team has been improving during the two years.

This is the final report of my two years contract.

2. ACTIVITIES

I assisted in conducting all the activities of the Filariasis team. We had a blood survey and a Mass Drug Administration (MDA) every year.

For the blood survey, I helped the team with the preparation, field work and data analysis. For MDA, I was involved with planning, packing the drugs, drug distribution and data analysis.

(1) Blood survey

The blood survey in 2002 was the midterm evaluation after three rounds of MDA of the PacELF programme. The purpose was to assess the impact of MDA.

We had some problems during this survey.

First, ICT test cards were changed from the previous year, so the quality of the card was also changed. The new ICT test cards had to be read ten minutes after dropping the blood to be accurate, as negative results would turn positive after several hours. For first few villages which were tested both before I joined and after, the cards were not read after ten minutes. Some of them were read at about ten minutes after sample was taken but others were read after several hours, or after returning to office (sometimes next day). As a result, we were not sure of the exact results.

Secondly, many failed test cards from which we could not see exact results, were found.

The reasons were as follows: (i) not enough blood was taken and applied to test

cards. (ii) too much blood was dropped onto the test cards. (iii) It would also have failed if blood wasn't dropped on the exact part of the test card.

The third problem was registration and numbering of ICT test cards and slides. These were inaccurate because of misnumbering. Blood surveys were usually held at a main fale in the village where the Filariasis team was staying. Most of the villagers came up to the fale to be tested. On the other hand, some of the team members went on home visits in the evenings to find people who had not yet been tested. For the home visit activities, they took pieces paper for registration. Sometimes they copied the information to the main registration book but sometimes they did not do that and they just kept the papers with the book. When they copied the paper, they renumbered to register in the main book. However, they did not renumber ICT test cards and slides. This caused confusion with results.

I discovered these problems and tried to solve them with our team.

For the first and second problems, we checked again on how to use ICT test cards with Dr. Ichimori who is the PacELF team leader when she visited Samoa in May 2002. After that I explained the exact directions on how to use ICT test cards to all the staff again, so as to avoid any failures. Nevertheless, we found a few failed tests. Those failed cases were not included in the results.

For the third problem, I suggested that we should put numbers on the registration book and slides before we went to the village to avoid misnumbering and extra work. To avoid any mix up with equipment, I suggested putting all equipment in order on the table in the field. The practice had been to put them randomly on the table. I also recommended that we copy all the registration papers from the home visit to the main registration book and renumber all the ICT test cards and slides from the home visit before we left the village.

As a result, there was much improvement in the performance of the survey and the number of failed tests was reduced.

During the blood survey in 2003, these problems were cleared but the team members were changed from the previous blood survey. I had to explain the procedures carefully again to both the new team members and also to the former members to make sure of the correct proprocedure. There is a permanent staff Mr. Lalomilo Maiava in our team. He is experienced with blood surveys and has good techniques for taking blood. Some of our staff had a few experiences, but not enough to perform in the field. All staff with the exception of Lalomilo, were not accustomed to this job. They were taught about Lymphatic Filariasis by Dr. Ichimori and Dr. Kimura who is a consultant of the Filariasis project, and who visited Samoa through the auspices of WHO. The training for taking blood was done by Lalomilo.

This survey was smaller than the previous one. It was a sentinel survey for 881 samples from 6 villages. It was not so difficult to perform, but there were some

problems which were different from the previous survey. Some villages had surveys going for several years in order to assess the changes in the prevalence rate of microfilaria. This was very important for this elimination project. However, one of these villages refused to be tested. We were aware that it was very troublesome for them, so we did not force them to comply. We had to select another village from the sentinel villages. We then had to explain carefully to the village people about the survey, as we would be continuing this sentinel survey for a further few years.

Consequently, we finished the survey successfully, and I entered all the data into the computer. I was supposed to train staff on how to operate a computer, but our computer for the training programme was out of order to carry out the training programme when I was planning to train them, and so we did not have enough time for the additional training.

(2) Mass Drug Administration(MDA)

The 4th MDA of 5 rounds planned by PacELF was held in 2002. For the preparation I asked YAZAKI Samoa, a Japanese company to give us boxes for packing drugs. Since our staff had experience with MDAs before, they organized the distribution in the same way as the previous one, and I assisted them. It was not successful. The treated coverage was the lowest of the 4 rounds of MDA which were carried out previously. I guess the reason why it failed was because the preparation was not properly done and there was no clear cooperation with other sections, such as community nurses, district health centers, health promotion and women's committees. I contributed to the project by entering data and with the results.

The MDA held in 2003 was the last one of 5 rounds. Samoa is the first country to complete 5 rounds of MDA programming by PacELF. Dr.Kimura came to Samoa to assist in preparation of this MDA. I made lists for every village and district to ensure how many drugs and registration books they needed according to Dr. Kimura's suggestions. That was very helpful and effective, not only for the packing and distribution of drugs, but also for analysis and follow up. A workshop was held by Dr. Kimura for community nurses and the Filariasis team. He lectured about the details of Lymphatic Filariasis and MDAs. We also had workshops at each health district for drug distributors, such as women's committee and village mayors. We explained about PacELF programme and the registration books. We worked closely with the district nurses. They cooperated with us very well. The people responsible for every book were listed according to the nurse's information. The list assisted us in cllecting the books from the villages. It was easy to pursue the books which had not been returned according to the list. When books were returned to the filariasis office, the team calculated each book, and I entered all the information from the books into the computer. Then I made a table of the summary, and updated it daily.

The table was displayed on the wall and the books which were not returned were marked. The follow up activity was conducted efficiently using this information and the list of the treatment coverage for each village at that time. Follow up of 5th MDA should be done well this time. However, because of the outbreak of rubella, and the problems of Cyclone Heta, community nurses became very busy and people were a bit ansettled. We could not make good progress after the cyclone at the beginning of this year. Nevertheless, the filariasis team made an effort to treat more than 80% of the whole population in each village. As a result, the final coverage of treatment was achieved to 80% in the whole country. As pregnant women, babies under two years of age, old people over eighty years, and very sick people need not be treated, the treatment coverage for the eligible population must be more than 90%. Since the filariasis team worked very hard for the preparations, distribution, follow up and calculation, this 5th MDA should be finished with improved results.

(3) Final evaluation survey

Filariasis team is carrying out the final evaluation survey to assess the effect of MDA. It is planned from May to November 2004. This is a very tight schedule. Therefore, the preparation is very important. I asked JICA to assist for two coolers which are used for packing and hand carrying in the field. We already done the trial survey at four villages and got some feedback from them. The method of this survey is different from previous surveys. The significant differences are as follows:

(i) The samples must be randomly selected in strict order.

(ii) The interviews about the overall MDA, clinical history, family history and treatment history need to be done at registration, as well as the general information for everyone.

(iii) The KAP study must be done on 20 people, who are over 14 years of age in each village.

Owing to this extra work to be done, we were somewhat confused in the field and as a result some materials were short. However, these problems will not occur if the preparations are done properly. The team has already recognized this possibility and so they have already packed the equipment for Savaii. In order to avoid misnumbering and confusion between the two teams, the ID number should be entered to the registration forms in advance. I have already done this for Tuasivi and Fagamalo districts. I have showed the staff how to do this. The numbers to be used in each village are for 1-200. However, extra forms should be packed in case there are failed tests. I have also taught some of the staff how to enter data into the computer, as I have already made the database for entering the results. Instructions are as follows:

(i) The file name is "entering data" in the folder of "FES 2004" listed in "My

Documents".

(ii) The list of villages is also in that folder.

(iii) Check the ID code for each village.

(iv) When data entry is completed, chose "Save as" from the File, enter "ID code" and "the name of the village" for the filename and save.

(v) Do not just save.

(vi) Save on some other disks as there is a possibility of damage sometimes and data will be lost.

(vii) Floppy disks are easy to be damaged because of humidity.

(viii) Save on other hard disks if possible and please remember that saving information on floppy disks is just a temporary measure.

I completed the Data Book for 2002-2003. All the data of blood survey and MDA is included. I also made the book for 5th MDA. It shows the process of 5th MDA with photographs.

The mission of PacELF programme is very difficult to carry out for the fialariasis team. The team, however, is improved very well in these two years. There is no plan to send a JOCV from JICA after me. I am sure that they can carry out their tasks by themselves with assistance from PacELF. I expect that the team will accomplish their tasks and eliminate LF from Samoa.

Thank you very much for your kind assistance for my activities and also for my life in Samoa. Fa'afetai tele lava & Ia fa'amanuia atu o le Atua.

Village list for Final Evaluation Survey 2004

No.	ID	Health District	Village	Population	No. of peaple to be sampled	
1	A1	Apia urban 1	Aai o Niue	180	180	
2	A2	Apia urban 1	Togafuafua	296	100	
3	A3	Apia urban 1	Mulivai	11	11	
4	A4	Apia urban 1	Toomatagi	258	100	
5	A5	Apia urban 1	Leififi	163	163	
6	A6	Apia urban 1	Vinifou	134	134	Alternative
7	B1	Apia urban 2	Tanumapua	620	200	
8	B2	Apia urban 2	Vaitoloa	773	200	
9	B3	Apia urban 2	Alamutu	264	200	
10	B4	Apia urban 2	Ululoloa	119	119	
11	B5	Apia urban 2	Faleula	2394	200	
12	B6	Apia urban 2	Leauvaa	2828	200	Alternative
13	C1	Leulumoega 1	Nofoalii	1688	200	
14	C2	Leulumoega 1	Afia	111	111	
15	C3	Leulumoega 1	Fasitoo Tai	1427	200	
16	C4	Leulumoega 1	Sina	197	197	
17	C5	Leulumoega 1	Faleolo	15	15	
18	C6	Leulumoega 1	Satuimalufilufi	663	200	
19	D1	Leulumoega 2	Apai	102	102	
20	D2	Leulumoega 2	Apolima island	88	88	
21	D3	Leulumoega 2	Salua	157	157	
22	D4	Leulumoega 2	Satuilagi	87	87	
23	D5	Leulumoega 2	Manono Uta	1256	200	
24	D6	Leulumoega 2	Faleu	327	200	
25	D7	Leulumoega 2	Matautu	202	202	
26	E1	Lefaga	Tafagamanu	313	200	
27	E2	Lefaga	Savaia	393	200	
28	E3	Lefaga	Faleseela	698	200	
29	E4	Lefaga	Safaatoa	587	200	
30	E5	Lefaga	Tanumalala	201	201	Alternative
31	F1	Fusi	Saanapu	1090	200	
32	F2	Fusi	Siumu	1112	200	
33	F3	Fusi	Tafitoala	391	200	
34	F4	Fusi	Sataoa Uta	964	200	
35	F5	Fusi	Siumu Uta	196	196	Alternative
36	G1	Poutasi	Matautu	349	349	
37	G2	Poutasi	Piu	69	69	
38	G3	Poutasi	Satalo	354	200	
39	G4	Poutasi	Togitogia	39	39	
40	G5	Poutasi	Salani	522	200	
41	G6	Poutasi	Vaovai	575	200	
42	G7	Poutasi	Saleilua	601	200	Alternative
43	H1	Lalomanu	Alafou	21	21	
44	H2	Lalomanu	Lotofaga	1121	200	
45	H3	Lalomanu	Lealatele	128	128	
46	H4	Lalomanu	Vaigalu	97	97	
47	H5	Lalomanu	Saleapaga	503	200	
48	H6	Lalomanu	Lotopue	216	200	
49	H7	Lalomanu	Ulutogia	194	194	Alternative

50	I1	Lufilufi 1	Uafato	300	200	
51	I2	Lufilufi 1	Samamea	89	89	
52	I3	Lufilufi 1	Taelefaga	182	182	
53	I4	Lufilufi 1	Musumusu	75	75	
54	I5	Lufilufi 1	Salimu	62	62	
55	I6	Lufilufi 1	Saletele	159	159	
56	I7	Lufilufi 1	Sauao	396	200	Alternative
57	J1	Lufilufi 2	Salelesi	409	200	
58	J2	Lufilufi 2	Saoluafata	674	200	
59	J3	Lufilufi 2	Solaua	19	19	
60	J4	Lufilufi 2	Falefa	1340	200	
61	J5	Lufilufi 2	Faleapuna	582	200	
62	J6	Lufilufi 2	Sauniatu	81	81	Alternative
63	K1	Tuasivi	Vaisaulu	128	128	
64	K2	Tuasivi	Saasaai	530	200	
65	K3	Tuasivi	Saipipi	719	200	
66	K4	Tuasivi	Salimu	255	200	
67	K5	Tuasivi	Luua	240	200	
68	K6	Tuasivi	Asaga	344	200	Alternative
69	L1	Safotu 1	Patamea	609	200	
70	L2	Safotu 1	Fagamalo	300	200	
71	L3	Safotu 1	Lelepa	217	200	
72	L4	Safotu 1	Avao	281	200	
73	L5	Safotu 1	Saleia	280	200	Alternative
74	M1	Safotu 2	Fatuvalu	173	173	
75	M2	Safotu 2	Paia	314	200	
76	M3	Safotu 2	Lefagaoalii	462	200	
77	M4	Safotu 2	Letui	278	200	
78	M5	Safotu 2	Samauga	295	200	Alternative
79	N1	Sataua	Sataua	786	200	
80	N2	Sataua	Tufutafoe	337	200	
81	N3	Sataua	Falelima	424	200	
82	N4	Sataua	Vaotupua	187	187	
83	N5	Sataua	Utuloa	35	35	Alternative
84	O1	Foalalo	Siutu	661	200	
85	O2	Foalalo	Foaluga	574	200	
86	O3	Foalalo	Sagone	791	200	
87	O4	Foalalo	Satuiatua	310	200	
88	O5	Foalalo	Fogatuli	273	200	Alternative
89	P1	Palauli	Gautavai	174	174	
90	P2	Palauli	Papa	290	200	
91	P3	Palauli	Pitonuu	440	200	
92	P4	Palauli	Gataivai	1164	200	
93	P5	Palauli	Vaitoomuli	678	200	Alternative

TRIAL SURVEY 24-27 May 2004

1	S1	Falevao
2	B1	Tanumapua
3	S2	Aele fou
4	S3	Lotoso'a Saleimoa

2004 BLOOD SURVEY FOR FINAL EVALUATION SAMOA

Health District: _____ Date: _____

Village: _____ Health Worker: _____

No.	ID No.	First name	Family name	Age	Sex	Nationality	ICT Result	MDA						Side effect						Clinical history		Treatment history	Family history Y/N	Comment
								0	1	2	3	4	5	0	1	2	3	4	5	Body parts	Attack Y/N			
1																								
2																								
3																								
4																								
5																								
6																								
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MDA:

1 - 1999
2 - 2000
3 - 2001
4 - 2002
5 - 2003

✓ - Treated
B - Baby
P - Pregnant
S - Sick
O - Old
A - A

Side effect:

F - Fever
H - Head Ache
S - Stomach upset
V - Vomiting
L - Lymphedema/Swelling
D - Dizziness
O - Others

Clinical history:

Lymphedema/Elephantiasis
Body Parts: LL - Left Leg
RL - Right Leg
LA - Left Arm
RA - Right Arm
LB - Left Breast
RB - Right Breast
H - Hydrocele
Size: S - Slight swelling
M - Enlarged with shallow folds
L - Greatly enlarged with deep folds

Treatment history:

S - Surgery
AB - Antibiotic
D - DEC
T - Taditional fofo
R - Rest
O - Others

Samoa Filariasis KAP Survey

Registration ID # _____

1.1 In your opinion, what is filariasis?

(DO NOT READ THE LIST BELOW, CHECK OFF AS THEY ANSWER)

1 ☐ disease
2 ☐ parasite
2 ☐ big leg / arm
9 ☐ Don't know
3 ☐ sickness
4 ☐ elephantiasis
2 ☐ big scrotum
99 ☐ Other _____

1.2 How do you get filariasis?

(DO NOT READ THE LIST BELOW, CHECK OFF AS THEY ANSWER)

1 ☐ Bite of a mosquito
2 ☐ Contact with someone who has it / person to person
3 ☐ Poor hygiene
7 ☐ Custom / cultural practice
99 ☐ Other _____
4 ☐ Drinking dirty water
5 ☐ Poor nutrition
6 ☐ Genetic / family history
9 ☐ Don't know

1.3 In your opinion, how can we prevent the spread of filariasis?

(DO NOT READ THE LIST BELOW, CHECK OFF AS THEY ANSWER)

1 ☐ Take medicine
2 ☐ Avoid people who have it
3 ☐ Use mosquito net
7 ☐ Custom / cultural practice
99 ☐ Other _____
4 ☐ Practice good hygiene
5 ☐ Proper nutrition / eat well
6 ☐ Other mosquito control method
9 ☐ Don't know

2.1 Do you think filariasis is a problem in Samoa?

1 ☐ Yes 2 ☐ No 8 ☐ Not sure

2.2 What do you do to avoid getting filariasis?

(DO NOT READ THE LIST BELOW, CHECK OFF AS THEY ANSWER)

1 ☐ Nothing
2 ☐ Avoid people who have it
3 ☐ Eat well
7 ☐ Custom / cultural practice
99 ☐ Other _____
3 ☐ Take the tablets / treatment / pills
4 ☐ Use mosquito net
6 ☐ Other mosquito control method
8 ☐ Practice good hygiene

3.1 Have you ever taken the filariasis pills?

1 ☐ Yes 2 ☐ No (skip to question 3.3) 9 ☐ Don't remember (skip to 3.3)

3.11 If yes, have you taken the pills every year for the last 5 years?

1 ☐ Yes (check NA for 3.3) 2 ☐ No 9 ☐ Don't remember

3.2 Why have you taken the filariasis pills?

(DO NOT READ THE LIST BELOW, CHECK OFF AS THEY ANSWER)

1 ☐ I don't want to get the disease
2 ☐ Because someone told me to
9 ☐ Don't know
99 ☐ Other _____
3 ☐ I want to stop the spread of the disease
4 ☐ for my family

3.3 Why have you not taken the filariasis pills?

(DO NOT READ THE LIST BELOW, CHECK OFF AS THEY ANSWER)

1 ☐ I don't have the disease
2 ☐ I thought you only had to take it once
3 ☐ I was pregnant
4 ☐ Religious belief
9 ☐ Don't know
99 ☐ Other _____
5 ☐ I didn't receive the pills
6 ☐ I don't think it is a problem in Samoa
7 ☐ Afraid the pills would make me sick
8 ☐ NA

Samoa Filariasis KAP Survey

Registration ID # _____

4.1 In your opinion, where do mosquitoes ~~come from~~ live?

(DO NOT READ THE LIST BELOW, CHECK OFF AS THEY ANSWER)

1 ☐ rubbish
2 ☐ dirty water
3 ☐ old tires
4 ☐ eggs in water
5 ☐ swamps / marshes / lakes
6 ☐ plants / trees
9 ☐ Don't know
99 ☐ Other_____

4.2 Do you feel mosquitoes are a health problem in Samoa?

1 ☐ Yes 2 ☐ No 8 ☐ Not sure

4.3 How often do mosquitoes bite you?

1 ☐ Rarely / never 2 ☐ Sometimes 3 ☐ always / often

4.4 When do mosquitoes bite you?

1 ☐ Daytime 2 ☐ After dark / nighttime 3 ☐ Both night and day 9 ☐ Don't know

4.5 Where are you when you notice being bit by mosquitoes?

1 ☐ inside at home
2 ☐ inside at work
8 ☐ don't remember
3 ☐ outside at home
4 ☐ outside at work
99 ☐ other _____

4.6 What do you do to avoid getting bit by mosquitoes?

(DO NOT READ THE LIST BELOW, CHECK OFF ALL THAT APPLY AS THEY ANSWER)

1 ☐ Use mosquito coils
2 ☐ Screens on windows
3 ☐ Insect repellant
4 ☐ Clean up containers / trash around house
9 ☐ Stay inside
11 ☐ Nothing
5 ☐ sleep under a bed net
6 ☐ kill with insect spray
7 ☐ AC inside the house
8 ☐ Pour fuel in puddles / marsh
10 ☐ burn trash / make smoke
99 ☐ Other_____

5.1 Do you store rainwater?

1 ☐ Yes describe storage container _____
2 ☐ No (skip to 6.1) (Plastic bucket? Covered? Outside? Etc..)

5.11 If yes, why do you keep rainwater?

(DO NOT READ THE LIST BELOW, CHECK OFF AS THEY ANSWER)

1 ☐ Cooking
2 ☐ Laundry
3 ☐ Bathing
4 ☐ Cleaning dishes / utensils
5 ☐ Toilet
6 ☐ Animals / livestock
99 ☐ Other_____

6.1 Is there anything that you would like to know about filariasis or mosquitoes?