EVALUATION REPORT
FOR THE
TUVALU TUBERCULOSIS AWARENESS PROGRAMME

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Summary
Between February and June 2009, a team from Auckland Regional Public Health Services (ARPHS) and a group of Tuvaluan health and community leaders (the Core Group) fine-tuned a Tuberculosis (TB) awareness programme for the Tuvalu community; the ARPHS doctor, nurses and community health worker delivered a training programme to community members over three evenings; and community members, supported by the Core Group, delivered seven workshops in Tuvaluan in the community, via seven different churches from Ranui to Pukekohe.

After the three training workshops, the participants rated themselves as confident to take the programme to their communities. Their competence was evident in the workshops themselves. Approximately 270 adults and 150 children attended these workshops, from this community of perhaps 2000 adults in Auckland. Approximately half of the adult participants completed feedback forms. From these forms and from the participant observations of the evaluators there is strong evidence that this was a very well-received programme, which was successful in educating participants about TB. Nearly all the participants (90%) found the sessions both interesting and helpful. Participants actively engaged with the education sessions and had many questions and comments about TB and about the workshop process which are detailed in the report. The fact that the programme was in Tuvaluan and was taken to the community by community members via the churches was appreciated.

The intention was to create an education programme that could be repeated in the community at intervals. To this end each congregation was provided with electronic and printed education materials, and each had at least one person, and often several, who had been at training sessions. In addition the Core Group intended to provide leadership and support.

The few and relatively minor details of administration that hindered the programme are noted for future reference. These included the mode for transfer of funds to the community groups and the protocol for translation which inhibited speedy translation. Nonetheless the programme was responsive to suggestions from the Core Group and trainees for changes.

The participants' feedback forms asked for further questions and the numbers of these suggest the need for repeated community workshops and for the use of those other media that are available to the Tuvaluan community, such as radio. In addition, in this group where cost and residency status are key concerns, the evaluators suggest that these topics could be added to the presentations.

Overview
In 2008, members of Auckland Regional Public Health Service (ARPHS) met with key health professionals in the Tuvalu community in Auckland to raise the possibility of a Tuvaluan TB awareness programme in the following year. The encouragement at this meeting led to ARPHS initiating and funding this programme, which was delivered in the first half of 2009. This report describes and evaluates the programme.

Two planning meetings between Tuvalu community leaders, including health professionals, and Public Health staff were used to design the process for the three "train the trainers" workshops in March 2009. A further planning meeting in April

after the training sessions worked on the process for the delivery of the programme to the community. Seven workshops were delivered to the community by June 30th. Two or three members of the evaluation team attended the initial meeting, all the planning meetings, the training workshops and all seven community workshops.

The evaluation of the programme gives an overview of its structure and content, reviews how it met its aims and objectives, and records participants' questions and suggestions. The evaluators are independent of ARPHS and the work was done *pro bono* as part of their community service from their research project on Transnational Pacific Health through the Lens of TB, based at the University of Auckland (see http://www.arts.auckland.ac.nz/ptb).

Planning

The initial planning meeting in 2008 was to establish whether a TB awareness programme was acceptable to key members of the Tuvalu community in Auckland. Dr Pikholz, head of the TB work at ARPHS, described the aims of the programme and explained why the Tuvalu community was being invited to take part. This was because of continuing high rates of TB in the community, with two-thirds of the cases being in children and young people, even though TB is treatable and preventable. She and the Public Health Nurses (PHNs) briefly described how such programmes had run with other groups in the past. The meeting was held at the Nile Rd, Milford, Pacific Family Health Centre, of Dr Esela Natano, a Tuvaluan doctor, the only Tuvaluan doctor in Auckland, with Teuluaki McQuarrie, Practice Nurse, and other ARPHS staff. Dr Esela and Teu gave the programme support.

Early in 2009 ARPHS employed a Project Manager for the programme, Manu Keung, who, working with her colleagues, arranged all the planning meetings and workshops, attended to the translation and production of materials, the provision of refreshments for planning and training meetings, and liaised between all involved. The two planning meetings (19 & 26 February) were crucial in working out who in the community would be trained and how the programme would be delivered to the community. Both meetings were held at Nile Rd. At the first meeting the Pacific Services Manager from ARPHS led the meeting, which was attended by Siliga Tala, Rev Suamalie Iosefa, Laine Steven, PHN Mary Campbell, Dr Pikholz, Dr Esela and Teu McQuarrie.

The plan formulated by the community leaders involved inviting the pastors of seven churches which are attended by the majority of Tuvaluans to be trained as TB educators and for them to invite a member of their congregation to also be trained. The "Core Group" who had been involved in planning would be trained too, and would help and support the other trainees in the community delivery of the programme, which would take place in the churches, ideally working with existing groups, such as youth, or women's groups and so on. This was a change from the original idea mooted by ARPHS, which would have involved representatives of the different island groups (Tu-valu meaning eight standing (together)). In Auckland, the Tuvalu island communities send representatives to a formal Tuvalu Community organisation, but it was thought that the Island associations and the Community as a whole meets too infrequently to be successful in this instance, where the programme had to be delivered quite quickly because of the mid-year date by which funding had to be expended.

The Tuvaluan planning group, who became known as the "Core Group" expressed the view that who the educators were was very important. They explained that on a topic like TB, which is a stigmatised disease, people who were known, trusted and of high standing in the community, such as the Reverends, would be more effective educators, especially when partnered by the Tuvaluan doctor and nurses. Similarly, at the "train the trainers" sessions, they expressed the strong desire for the presence of Dr Cathy Pikholz and the Public Health Nurses, not just for their knowledge but because of their status as health professionals.

Very careful attention was given to the translation of some of the educational materials about TB into Tuvaluan, to ensure that Tuvaluan (rather than Samoan) words were being used, and that the tone was correct, for example, encouraging rather than frightening. As evaluators, we noted a very sincere effort to get things right. A community leader expressed the importance of the community owning the programme and its success. He said, "If the programme fails, the community fails".

The budget for the programme ($10,000) was discussed, with approximate costings of the various expenses, mea alofa to the church groups, and payment of the educators as trainees and trainers. The community leaders advised on how and what payments might be made.

It was recognised that not all Tuvaluans attend these seven churches which extend from Pukekohe to Warkworth, but that this approach should reach the majority. It was hoped that word of mouth would do the rest, but, if necessary, the Core Group could also take the message to other groups. Dr Natano's very frequent appearances on the Friday evening Tuvaluan radio programme on Radio 531PI, hosted usually by Fala Haulagi, was noted as a good avenue for outreach. The sustainability of the educational programme beyond the life of the funding by having ministers and key members of congregations trained was also stressed, as with trained people and the educational resources, repeat sessions could be arranged. ARPHS provided each church with powerpoints, flip charts and some handouts in Tuvaluan.

Training

The training programme consisted of three two-hour training sessions that were held on three evenings over the period of a week in March at the Ranui Community Action Centre. Three sessions of two hours each was a shorter training time than usual for ARPHS. However, with the Core Group to assist and the busyness of everyone, it was agreed that three would suffice, especially given the numbers of health professionals and pastors among the trainees. A summary of the content of each session is provided in Appendix 1.

Although the plan was for each trainee to come for the three sessions, this did not eventuate exactly as planned. A solid core of trainees attended each session but because of illness, clashes, and similar, a few people attended only one, or more usually, two, sessions. Although the idea of two people per congregation was invoked several times, this also was a little different in practice. On the first training night six or seven churches were represented but on the other two evenings it was down to four or five churches being represented. No one came from the Seventh Day Adventist church. Among the 'trainees' attending the sessions were the doctor, the NZ

registered nurse, two Tuvalu trained nurses who were not registered in NZ, a community health worker and the (then) manager of mental health services at West Fono (also a Reverend), several pastors and student pastors, and Siliga Tala (ex-President of the Tuvalu Community Association), along with the three evaluators. Thus in addition to the Core Group and the pastors, the people selected by their pastors from the congregation to attend training tended to be people with backgrounds in health or who were studying to be pastors.

The workshop activities, skilfully facilitated over the three evenings by PHNs Mary Martin and Jill Miller, were directed towards two main goals. The first of these was to educate participants about TB and the second to teach participants how to present what they had learnt to their communities. Each of the programme's sessions included a wide variety of activities (Refer to Tables 1-3, Appendix 1) and all trainees were encouraged to participate in each activity. Those attending and participating were fully engaged in the process and the variety of activities was stimulating. The 'hands on' approach encouraged participants to actively engage in learning and with one another. This was clearly demonstrated through the planned activities, for example the teams engaged in the 'TB Fact Game' (Refer to Table 2, Appendix 1) and through the kinds of questions and debates that the trainees raised – at times making it difficult for the facilitators to keep to the agreed timeline. The activities aimed at preparing participants for their community presentations gave them a safe but realistic environment in which to practise their presentations and gain confidence with presenting the material in public. This confidence was clearly expressed in the private evaluations that 14 trainees completed on the last evening. Everyone rated their confidence to be able to take the training to their communities as 5 out of 5. It was also observed by the evaluators that even where individuals might be a little unconfident in some areas of their TB knowledge, or a little diffident in their group presentation, the knowledge of the group they were working in was sufficient to be able to make up for this. This reinforced the wisdom of the Core Group's insistence that more than one person in each congregation be trained, and that the Core Group support the presentations to the communities.

The relationships that the facilitators maintained with the participants throughout the workshops were marked by friendliness, respect and humour. For example, the PHNs always took time to greet participants as they arrived and left each session. The PHNs also made themselves very accessible to the participants. They provided each participant with their contact details and offered their help and support for future community presentations. The chatting over refreshments, and the provision of hearty snacks for these evening sessions, where people had not had the opportunity to eat dinner, and in many cases had to drive for an hour in heavy traffic, was conducive to open relationships and helped ensure everyone had the energy to participate.

The PHNs also communicated with participants with positive comments and clear language using vivid examples to illustrate key TB facts. For example, the nurses described latent tuberculosis infection as 'sleeping TB' where the germs are still in people but they are sleeping so they cannot harm them or others around them. This description proved to be very successful as throughout the following workshops participants often referred to 'sleeping TB'. Case studies brought the concepts to life and several PHNs discussions of actual but anonymous cases, especially involving extended families, were particularly well received. However, for the Tuvalu people,

where there are no cows or possums on their home islands, and where very few, if any, would ever come into contact with bovine TB, it may be that the small section on bovine TB was an unnecessary complication.

After (or often during) each activity, participants were given the opportunity to ask questions and to make comments. This was a positive aspect of the programme as it minimised confusion or misunderstanding by participants and also it allowed the trainees to provide alternative points of view and corrections. All questions were answered in a positive and constructive manner and suggestions were taken on board. However, this was one area where compressing what is usually eight hours of training into six at times meant that these discussion sessions were truncated. One of the comments, for example, raised by a Reverend was offered as "a gender issue" (to considerable laughter). In one of the flip charts/powerpoints, there is a section about vulnerable people, for example babies and older people. The illustration of the older person is of a rather frail-looking older lady. It was suggested that men looking at it would think that TB only affected older ladies and therefore would just brush off the education as being not relevant for themselves, and therefore the figure of a man should also be added. Another suggestion included adding some of the epidemiological information to the training powerpoint/flipchart to show why it was important for Tuvalu people to be aware of TB. A further important idea was to add a slide which directly addressed stigma and combated some of the negative ideas that are held about people with TB, and the discrimination against families where some people have had TB, which the Core Group and other trainees had reported were significant problems in their community. These last two suggestions for extra powerpoint material were implemented and were available in English.

At the end of the final training session there was a ceremony during which Dr Pikholz presented certificates, amid much joking. The sessions concluded with singing and short speeches and much good fellowship.

The delivery of the programme to the community

The primary aim of the TB Awareness Programme, as set out in the brief provided by the ARPHS at the beginning of their consultations with the Tuvalu community, is "to provide a teaching programme that enables the participants to gain knowledge about tuberculosis, which can be disseminated to the Tuvaluan community in the Auckland Region" (Auckland District Health Board 2009:5). In order to assess how well the programme met its aims we evaluators, as participants and observers, documented the three training sessions, including the interactions during small group work and during recreation times. In addition we attended seven community workshops. It was evident that the trainees who presented at the workshops had gained basic knowledge about TB categories, TB transmission and treatment. Important among these was the difference between latent tuberculosis infection and active TB infection, and between TB which was infectious and which was not. Through workshops, the presenters made clear points to other community members on the following:

Key points

- There are high rates of TB in the Tuvalu community in Auckland and in Tuvalu, and that is why we need this programme

- TB can only be transmitted through inhaling the germs, although not everyone who breaths them in will get sick
- Some people who inhale the germs will get 'sleeping TB' where they are not sick and can not infect others
- You can get TB anywhere in your body and there are lots of symptoms such as fever and coughing
- Some people are more at risk of getting 'TB' such as people who are sick drink lots of alcohol, or live with people who have TB and the very young and the elderly
- You can tell if you have TB by having a mantoux test and x-rays and some other tests
- Tuvaluan babies should have a BCG injection
- TB is quite hard to catch and you usually need prolonged contact, such as in a household
- To spread TB, droplets from infected lungs have to fly through the air (Because the same word 'suavale' is used for saliva and sputum, this point was explained very fully with the English words being used)
- To reduce TB in the Tuvalu community people need to understand it, not be frightened, but to go to the doctor if a cough persists or they have other symptoms. Community members need to include and support people with TB and their families
- Treatment for TB can be prolonged and people have to be faithful in taking their pills
- In some sessions that TB treatment was free was mentioned. In others the cost came up in question time
- In several sessions, the whole awareness programme and the training was described

Because of decades of learning about hygiene in relation to TB, some participants continued to express that TB could be spread through the sharing of utensils or coughing over food. While this is not the case with the transmission of TB, these ideas about hygiene are protective against other diseases and the wisdom of, for example, careful washing of utensils and covering food (or mouths while coughing) was encouraged by the presenters for other reasons. However, the emphasis on segregation and separate utensils for TB is also a component of stigmatisation.

The workshops were all delivered in Tuvaluan, with occasional use of English, to 270 adults and around 150 children (see Table 1). These were not quite as planned in that the Tuvalu-Tokelau church in Grey Lynn attended by Dr Natano was substituted for the SDA church, when it became clear that the SDA church was not able to host a session. With Rev Suamalie's help, Manu liaised with the churches to organise the programme of workshops. The churches themselves decided on the timing and venue and provided any refreshments. The four larger sessions (1, 2, 4 and 6) were held in spacious churches after the Sunday service (or in one case after a church meeting with a congregation that met in a school hall). These arrangements were convenient in terms of people's travel, but they did mean a long time at church for participants. Workshop 3 was also in a school hall on a weekday evening. It was a very cold, wet, miserable night and people had to come out specially. Workshop 5 and 7 were held in private homes, No 5 in the evening, and No 7 late on a Sunday afternoon. We were

told that not everyone who wanted to come could fit in for workshop 5, and the space was very crowded. This was not a problem for workshop 7.

The population of Tuvaluans in Auckland is thought to be around 3000, and it can be estimated that approximately 2000 people are over the age of 15. (These figures are based on the 2006 Census, which is thought to seriously underestimate the numbers of Tuvaluans in NZ, the likely 80% proportion living in Auckland, and the youthfulness of Pasifika peoples in NZ. The Census recorded 2600 people, but nearer 4000 is thought to be more realistic.) The seven workshops have therefore directly reached around 15% of the adult population.

Table 1 Attendance at the Tuvalu TB awareness workshops

Workshop	**Attendance**
1 Henderson, Woodruffe St, 26 April 2009 (Mainly Nui, Nanumea and Nukulaelae)	70+ adults and 70+ children
2 Te Atatu Peninsula, Rutherford School, 26 April (Mainly Niutao)	35 adults and 20 children
3 Henderson, Bruce Mcclaren Intermediate 11 May (Mainly Nukufetau)	14 adults and 6 children
4 Henderson, Aetna Rd, 24 May (Mainly Funafuti)	70+ and 30 children
5 Ranui, Carlas Lane, 27 May (Mainly Vaitupu)	20+ adults and 10 children
6 Grey Lynn, Crummer Rd, 7 June (Mainly Tuvalu & Tokelau)	35 adults and a few toddlers/babies
7 Pukekohe, 21 June (From various Tuvalu islands)	20 adults and youth and 6 children
Total number of adults & youth attending Total number of children attending	Approximately 270 Approximately 150

Each session took much the same format, usually starting with a prayer, followed by introductions of the Core Group and other presenters, as well as Manu and the researchers from the University of Auckland doing the evaluation. After introductions, Dr Natano or occasionally Teu or Laine, presented the overview of the workshop and a brief survey of the epidemiology of TB, with an emphasis on TB in the Pacific, New Zealand and Tuvalu. This was followed by either a person from the congregation who had been trained, including Suamalie, Malo, Sila, Maheu, Peggy, Atekosi, Apisika, or Teu or Laine, presenting the details of TB, symptoms, how it is spread, how you can test for it, treatment and prevention and who is most vulnerable. The final discussion was on the problem of stigma and how reducing the stigma is important in preventing the spread of TB. A prayer and sometimes a hymn ended the presentation. In one workshop a quiz which had been used in training to check our knowledge was used. However, the power point was in English and seemed to cause some confusion. Several sessions included refreshments.

All presentations used the power points provided by ARPHS and amended during the training process. Manu attended each session and brought the computer and data show and set up the equipment. Not all congregations had this equipment so her

presence was vital. Her attendance as a representative of ARPHS was also important for more symbolic reasons, as was the attendance of the Core Group, and in each case, one or more pastors of the congregations.

Questions and discussion points

The workshop participants were particularly impressed with a histogram of the incidence of TB both in Tuvalu and in NZ, and came back to this many times in nearly all the workshops. This showed high rates of TB in both places. Questioning and discussion was very lively and was in Tuvaluan. In most sessions there was a lot of interaction during the presentations, in other sessions, questions and discussion broke out after the formal presentation. There was a lot of laughter and joking, but this did not mean that those present were not serious. They were extremely attentive and asked a wide range of questions. In many cases, the presenters talked about other health issues, so that the workshops became a broader health education session. H1N1 (swine flu) was a concern during this time. We evaluators recorded each session in note form and particular attention was paid to the questions asked and the points of discussion. The questions are noted in the bullet points below.

Questions asked during the workshops

- How long before you know that you are infected?
- Does kissing spread infection?
- What injections are used for TB?
- How come BCG is only partly preventative?
- Will you get TB if you try and loose weight? (This was in response to a picture showing that one symptom of TB is weight loss)
- Does shortness of breath mean you have TB?
- Can you get TB from a wet toilet seat? (This was in response to a picture of a man peeing into the toilet to produce a urine sample)
- If you have a stomach ache but no other symptoms should you see the doctor?
- Does smoking contribute to TB?
- If beef is half-cooked can you get TB? (This was from the slide on bovine TB)
- Does having gout mean you have TB? (From a slide showing TB of the bone)
- Does drinking too much alcohol really speed up TB? And is it ‘kava’, the term on the slide, or ‘pia’ (beer)?
- Do headaches mean you have TB? (One of the symptoms depicted on a slide)
- What is the health system doing for Tuvalu people, given the high rates?
- Why aren’t BCG injections compulsory for babies here?– they are in Tuvalu
- Is immunisation harmful?
- What are practical things families can do to prevent TB?
- Questions about costs: GP visits, hospital treatment, drugs, treatment in the community
- Questions about costs for people who are not citizens or permanent residents

Towards the end of the each session evaluation forms were passed around (see Appendix 2) and people were invited to fill them out. The form was in Tuvaluan on one side and English on the other. Most people used the Tuvaluan side and the Tuvaluan language to record their answer. The qualitative answers were transcribed and translated into English where necessary. Over half of the adults and youth attending completed these forms, which were anonymous. The forms also asked

people to write down any questions that they had and these were collected to pass to Dr Natano and the Core Group and ARPHS so that they can be discussed in forthcoming radio programmes and other venues and used in future programmes.

Results from the Feedback Forms

A third of the participants stated that they already knew quite a lot about TB before they attended the workshop, and another 50% knew something about it (see Table 2). This perhaps reflects the relatively high levels of TB currently and in the recent past in this community, where many people have had family members with TB. Unfortunately there was no easy way to tap into this knowledge, although some was revealed through questions and comments as described below.

Table 2 How much did you know about TB before the workshop?
E pefea tou iloa ite TB mai mua ote akoakoga tenei?

Workshop number	**Number of completed forms**	**Approx number of adults**	**1 Not much**	**3 A bit**	**5 A lot**	**Missing**
1	16 (6 in English)	70	4	6	5	1
2	14 (0 Eng)	35	1	10	3	0
3	15 (1 Eng)	14	0	12	3	1
4	45 (13 Eng)	70	7	23	13	2
5	10 (3 Eng)	20	2	3	5	0
6	25 (14 Eng)	35	6	12	7	0
7	17 (3 Eng)	20	3	6	8	0
Totals N %	143 (Eng40) 28% (Eng)	270 53% responded	23 16%	72 50%	44 31%	4 2%

Our observations of the workshops suggested that they were very well received and this is backed up in the quantitative data (see Tables 3-4) presented below. The vast majority of people found the workshops both interesting and helpful.

Table 3 How interesting was the workshop?
E mata e fiafia koe ki akoakoga konei?

Workshop number	**1 Not interesting**	**3 A bit**	**5 Very**	**Missing**
1	0	0	15	1
2	0	1	13	0
3	0	1	14	1
4	0	2	41	2
5	0	1	9	0
6	0	1	24	0
7	0	1	16	0
Totals	0	7	132	4
%	0%	5%	93%	2%

Table 4 How helpful was the information about TB?
E mata e isi se feoasoani ote akoakoga tenei kia koe?

Workshop number	**1 Not helpful**	**3 A bit**	**5 Very**	**Missing**
1	0	1	14	1
2	0	0	14	0
3	1	0	14	1
4	0	3	39	3
5	0	2	8	0
6	0	0	25	0
7	0	2	15	0
Totals	1 0.5%	8 5.5%	129 90%	5 3.5%

The first open ended question asked participants to write down any questions they had. Many people used this just to say "no questions but thanks very much" or "my questions were answered already" or variations. However, others did have questions, and these will be useful for future workshops within the Tuvalu community and training programmes with other communities. The bullet points below summarise the questions. Many of these questions were also covered in the workshops, but the answers bear repetition. These questions also indicate that there is room for further explanation: for example, one could repeat that a person here in NZ who is on TB treatment in the community is not infectious. People on treatment are kept in hospital if they are infectious. It is the period before diagnosis and treatment that is the problem time for spreading TB. This is a key understanding for reducing social isolation for TB patients and their family, for speeding up going to the doctor and ultimately for reducing TB in the community.

Questions asked in the evaluation form

- Why is drinking alcohol related to getting TB?
- Are there side effects from TB medications?
- Do we have to pay, and is there financial assistance to buy medications?
- Does it spread through kissing?
- How can I protect my family, especially babies, if I am looking after a TB patient at home?
- Why are children or adults still at risk when they have had a BCG injection?
- If your ancestors had TB is it likely that you will get it?
- I'd like more clarification about the different types of TB.
- Is it possible to get TB meningitis?
- Can you die from TB?
- Could a person who is coughing be suspected of being infectious?
- If I am a known case and follow all I learned today, is it possible to get infected again?
- If a pregnant lady has TB, will the baby also have it?
- How do I protect myself from someone with TB? How will I stay away? What are the preventive measures?

- More than once there was a request for TB testing with the congregation or at the workshops
- Does TB spread within families?
- Disappointment was expressed at the high level of TB in Tuvalu itself – with a comment that it can't be the possum as there is no possum in Tuvalu (there are no cows either. This is a reference the illustrations on the powerpoint about bovine TB.)
- What happens if I touch a dead possum?
- What are ways to get TB? What are the symptoms?
- What is the difference with getting pneumonia if the person already has TB?
- Can a baby who has had the BCG, but is growing up with a TB person, get infected?
- Can a hotline be set up where people can anonymously report people suspected of having TB and then the nurse can go and talk with the family concerned?
- Should a TB patient have any food restrictions?
- How often should you be immunised if you had BCG before coming to NZ?
- What are you going to do for the people to help them?
- Is TB partially spread by the conditions in the home, such as untidy and unhealthy housing?

The second open-ended question asked what was best about the workshop. Most people reiterated that it was a very important programme, that they were very happy to have it delivered in the community and in the church context and that it was especially good to have it in Tuvaluan. Several mentioned their own families' brushes with TB, e.g., "very important because all the adults have had a positive skin test and all the children have been negative". Others noted that it was important to realise that there were high levels of TB in their community, and now they know enough to work to prevent it in their families and community.
Some were more specific, saying

- Have learned the importance of going to the doctor if any of the symptoms appear
- The community had to work together on this problem
- It was important not to discriminate against TB patients
- It was quite safe to share eating utensils
- It was important to spread the word that TB is curable
- There is no need to be scared
- No reason to be shy or embarrassed to go to the doctor – it is just like pneumonia in that regard

All of these were key messages delivered during the training of presenters, indicating the success of the training sessions in preparing the presenters.

The final open-ended question asked for suggestions for making the workshop better. Some people took the opportunity to make some more general suggestions, such as "work together to solve the problem", "take care of TB patients", "need to take medications", "need to see the doctor or go to the hospital". There were many specific suggestions, listed in the bullet points below.

Suggestions for making the workshop better.

- Spreading the word more widely, including to specific groups, such as youth
- Taking more time for the workshop, with testimonies from people who have been through TB, to reach a better and more supportive understanding
- More time for questions
- Similar workshops each year; Continuing and repeating the programme
- Watching a movie about TB patients
- Run the same programme in island communities as some people hardly go to church (this was probably a reference to the organisation of Tuvalu people in Auckland based on the islands that they are from)
- Use radio, in NZ and Tuvalu, and also promote the programme in the island group (ie in Tuvalu itself), especially the smaller islands
- Present it at a better time (when people are not in a hurry to have lunch!)
- Better to present it in families or small groups (this was from one of the larger sessions)
- To explain clearly (this was a reference to using a quiz to reinforce learning at the end of the programme. It was used only once)
- Presenters to be on time. (For this workshop, a change in the meeting address was not communicated to the presenters until after the start time.)
- It would be good to have pamphlets in Tuvalu language to distribute to all Tuvaluan families in NZ
- Encourage people to have a balanced diet and not to eat takeaways
- Provide refreshments (healthy ones)
- Advise people about faatele (singing/drumming/dancing) and bingo gatherings. Too much coughing caused by singing
- Provide the test injections (Mantoux tests) during the workshop
- Make it more fun, more colourful pictures, more of the team should present (it is boring having just one)
- Dr Esela or other qualified medical personnel should present it
- Arrange a better, more spacious, place for the workshop. TB could be spread in crowded places and therefore the workshop doesn't promote health
- Use more expressive Tuvaluan words to best describe the important parts of each topic

Administration and Sustainability

The close involvement of Manu Keung from ARPHS, in managing the whole programme as well as attending everything, and the Core Group of five Tuvaluan health professionals and community leaders, who had been with the project from the initial planning right through to the final workshop, was crucial to the success of the programme. Even though one or more members of each of the seven churches had been to at least one training session, and usually two had been to all three training sessions, the success of the programme was also dependent on the support of this Core Group. This was demanding on these people, although all of them said that it was not a big problem to do this work.

The printed and powerpoint resources used at the workshops were given to each church with encouragement to repeat the workshop at intervals of perhaps six months or a year, or to present to particular groups within the church. However, this

evaluation period was not long enough to see whether this would happen. As evaluators, our guess is that it is likely to need some involvement from members of the Core Group for the long term programme of repeated workshops to be sustainable, and also that this support will be there. This is important not just because of the knowledge of the Core Group but also because of who they are. In addition, at least two of the churches did not have the electronic equipment for the power point and one pastor noted that for the church to carry out other health workshops, they would need to be supplied with this equipment. The flip charts, which are a low-tech alternative, were not used in the presentations and nor were the Tuvaluan language fact sheets.

Getting payment to the right people at the right time proved to be extremely difficult, especially where that involved 'koha'. This is partly because the ARPHS accounting requirements did not mesh well with the systems at work in the community (for example, the limit of 'koha' is $30.00) and partly through difficulty in obtaining invoices with all the correct details included. As a consequence Manu spent a large amount of time trying to distribute the funds. Eventually, she needed to call on the good offices of Siliga Tala, (a former Auditor General of Tuvalu) and a member of the Core Group, to arrange for payments in a timely manner. In retrospect, it would have been easier to ask one of the large churches to act as a "subcontractor" for some of the expenditure, however, direct payment to the churches themselves was seen as desirable by the Core Group. All the trainees and presenters received financial compensation, and the churches hosting the sessions were also given a lump sum to cover their expenses, e.g., venue hire, heating and lighting, refreshments, and to cover expenses of future workshops they might hold. There were reported to be very happy with these arrangements.

There was also some difficulty in having translations done, as any material provided by ARPHS for translations had to be done through approved (and expensive) channels, even though qualified people in the community volunteered to the translation and could have done it to a high standard. This meant that when changes to the materials were suggested during the training sessions, it was not possible to have it all translated in time.

The issue of residency status and TB treatment, and the costs of treatment came up in most question times. These are vital concerns in this community and sensitive issues. In hindsight, it would have been helpful to have a slide on this for the powerpoint, in much the same way that the final slide on reducing TB in the Tuvalu community was presented. Both these should be in Tuvaluan.

Conclusion

All the evidence collected suggests that this was a very successful programme which was extremely well received in the community. However, as the questions raised in the sessions and written on the feedback forms indicate, many people still have questions that they would like answered, or in many cases, would like further reassurance on. In addition, many suggestions were made about how the workshops or the programme itself could be improved both for Tuvaluans in Auckland and elsewhere.

As evaluators, we would like to congratulate the team from ARPHS and the "Core Group" from the Tuvalu community and the partnership that they forged through this

programme. We were also impressed by the abilities of the trained presenters to get their messages across and the easy interactions between them and the Core Group at the presentations, especially when difficult questions came up. At the same time, we note that health education, though important, is only part of the solution to high TB rates. Secure residency status, healthy homes, adequate income and good social support is also vital, along with good access to primary care and secondary health services.

Acknowledgements

We would like to acknowledge Dr Anneka Anderson who allowed us to use her evaluation of a TB Awareness programme in the Indian community as a starting point for ours. Our thanks go to all the staff of ARPHS who were involved in this programme, the Core Group and presenters, and the all the participants in the workshops for making our work so easy.

Appendix 1

Appendix1: Table 1. Contents of the 1st session, 11 March 2009, 6.30-8.30.

Activity	**Description** Refreshments while people gathered
Introductions	Prayer. The PHNs introduced themselves to the participants and outlined the schedule for the programme.
Group Exercise	Introductory exercise, each participant had to provide some background information on themselves and indicate where on the maps of Tuvalu and NZ they came from and lived.
Presentation	Dr Cathy Pikholz, using powerpoints, described TB and how it works, then provided an overview of the patterns of TB (epidemiology) in the world, the Pacific, Auckland, and the Tuvaluan community. This was followed by a busy question time
Information Folders	The PHNs , Mary Martin and Jill Miller, went through the contents of the information provided to participants in their 'TB folders', and outlined what to expect over the next two sessions. The flip charts, which also come as powerpoints, were introduced. Closing prayer followed by refreshments.

Appendix 1: Table 2. Contents of the 2nd session, 16 March 2009, 6.30-8.30

Activity	**Description**
Case study and Question session	Prayer. Introduction of the session. PHNs, Ann Morrison and Kathy Smith told of their experiences with two different family groups which illustrated the points that had been covered in the previous sessions.Participants were asked if they had any questions from the previous day's session.
TB Fact Game	Participants organised into groups and asked to answer true/false questions about TB.
Flip charts	PHNs Mary and Jill presented the flip charts in Tuvaluan and English, modelling the presentation, and talking about the different ways the charts or powerpoints can be used.
Practice with flip charts	Small group practice with the charts and powerpoint, followed by a general discussion of any issues, corrections etc
Stigma	Presentation and discussion on stigma surrounding TB

Appendix 1: Table 3. Contents of the 3rd TB session, 17th March 2009, 6.30-8.30.

Activity	**Description**
TB treatment	PHNs and Community Health Assistant discussed types and length of treatment for TB, including DOTS
Skit	Difficulties encountered by the PHNs in supporting some of their patients to maintain their treatment.
Flip-charts	PHNs went through the participants' TB flip charts to prepare them for their workshops
Group exercise	Participants had to break into groups and present their flip charts as they would in their workshops. This was followed by discussion of the flip charts and what should be changed.
Budget and the next steps	How the budget is being spent and where we go from here
Ending	Presentation of certificates, thanks, singing and refreshments

Appendix 2 Participant feedback forms

Tuvalu TB Awareness Project
Community Workshop Evaluation Form

Thank you for taking a minute to complete this form

Please circle the number that best matches your opinion

	Rating	Comments
How helpful was the information about TB?	1 = not helpful 3 = a bit helpful 5 = very helpful	
How interesting was the workshop?	1 = not interesting 3 = a bit interesting 5 = very interesting	
How much did you know about TB before the workshop?	1 = not much 3 = a bit 5 = a lot	

Please write down any question about TB that you would like answered.

What was best about this workshop?

How can we make the workshop better?

Thank you for your feedback

Tuvalu TB Awareness Project
Community Workshop Evaluation Form

Fakafetai mo tou taimi o tali ki fesili.
Fakapukupuku te napa tela e fakatau koe e tautonu mo tou manatu.

Fesili	Fakatulagaaga	Manatu/Fesili
E mata e isi se fesoasoani ote akoakoga tenei kia koe?	1= Seai 3= E isi malie 5= Llasi kii	
E mata e fiafia koe ki akoakoga konei?	1= Se fiafia 3= Fiafia malie 5= Fiafia kii	
E pefea tou iloa ite TB mai mua ote akoakoga tenei?	1= Seai soku iloa 3= Se lasi 5= E lasi kii	

1.Fakamolemole ko tusi mai au fesili ki mea kola e fia maina koe fakalei iei e uiga mote masaki tenei?

2.Sea te aoga ote akoakoga tenei kia koe mo tou kaiga?

3.E mata e isi sou fesoasoani kite fakaleiatuga ote akoakoga tenei mo taimi mai mua?

Fakafetai lasi mo tou fesoasoani!!!