

**VIETNAMESE HEALTH INFORMATION ACCESS AND USE:
CAPACITY DEVELOPMENT PROGRAMME**

EVALUATION REPORT

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Acronyms and abbreviations

CIMCI	Central Institute for Medical Science Information and Technology
HCMC	Ho Chi Minh City
HSPH	Hanoi School of Public Health
INASP	International Network for the Availability of Scientific Publications
INFORM	International Network for Online Resources and Materials
LRC	Learning Resource Centre
MT	Master Trainer
NACESTI	National Centre for Scientific and Technological Information
PNT University	Pham Ngoc Thach Medical University

Thanks

I would like to thank INASP, INFORM, the Master Trainers and the Heads of participating Institutions for assisting me during this evaluation and for allowing themselves to be interviewed. I would also like to thank the students and doctors attending the Master Trainer workshops for meeting with me. I am also grateful for the hospitality extended during my visit to Vietnam. Without everyone's cooperation, this evaluation could not have been carried out.

About the Evaluator

This evaluation was undertaken by Shampa Nath of Healthlink Worldwide, a UK charity focusing on health communication issues in developing countries. Shampa has a background in participatory communication, programme management and monitoring and evaluation. Following the closure of Healthlink Worldwide in October 2010, Shampa was contracted by INASP to complete the evaluation.

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EXECUTIVE SUMMARY

In Vietnam as in many low income countries, health professionals are able to access a wide range of free online health information resources. However, despite notable improvements in connectivity, health professionals and researchers still make only limited use of these. In 2009 International Network for the Availability of Scientific Publications (INASP) in the UK, International Network for Online Resources and Materials (INFORM) in Sweden and Hanoi School of Public Health (HSPH) in Vietnam introduced a training programme for health practitioners and librarians in Vietnam to address this underutilisation issue. The ultimate objective would be to change the information culture of a sector at the practitioner level in a sustainable way by building the capacity of all key institutions to undertake their own high quality and high impact information training and to actually deliver that training.

The key objectives of the programme were:

- Get online information access and usage ingrained across the health research and education sector in Vietnam;
- Take full advantage of the online information resources that are now available;
- Build the capacity of librarians and information professionals to effectively provide e-information services and training, and
- Enhance the health sector by encouraging better use of up-to-date information via online information resources.

The main activities in this programme were:

- Developing teams of expert information use and training practitioners who can collaborate and combine their knowledge and experiences.
- Supporting librarians to run and deliver a series of high-quality, high-impact online-information training workshops to over 600 health researchers, practitioners and students in participating institutions.
- Providing locally tailored training materials and supporting information resources that can be used by all participants in the programme to optimise their access and use of online health information resources. This included the Source compendium, which covers topics such as finding and accessing different types of resources, information on specific topics and for different professional purposes, and guidelines on how to process the information accessed. The compendium was provided in English and Vietnamese.

The evaluation of the training programme aimed to:

- see if the model used to deliver this training programme works;
- determine if the programme has achieved its objectives;
- see if the training methodologies, particularly the intensive approach, have been effective, and
- capture lessons which can be shared with national and international development, health information and training communities.

FINDINGS

i) Without exception all those interviewed were of the opinion that the training programme was extremely valuable, not only for themselves and their institutions but for the wider health sector. The Institution Heads felt strongly that the programme had contributed great value to their institutions and that this training programme was a good fit with the strategic objectives of their respective institutions.

ii) The Master Trainers felt that they had benefitted from this programme on several fronts:

- A significant gain from this programme is their *increased awareness of many types of free online health information resources* including grey literature.
- *Learning how to do needs assessments* prior to training workshops *and post workshop evaluations* are valued by the Master Trainers.
- Master Trainers also feel confident that they *can now assess the quality of the online information sources accessed* and determine which ones are good and reliable.
- *Links with librarians in other parts of the country have become stronger* as health information is shared among them.
- There has been *tremendous improvement in the teaching and presentation skills* of the Master Trainers.
- There is a *better understanding of how to organise all aspects of workshop preparation* including the administrative tasks.
- The Master Trainers spoke of the personal gains in terms of *increased confidence*.

iii) There is now *recognition by librarians of the role they play in the field of health information and the responsibility of spreading information and knowledge* to others in the medical field.

iv) Most of those who attended workshops conducted by the Master Trainers, whether undergraduate or postgraduate students or doctors, librarians or researchers, expressed satisfaction with the content and quality of the training, and its value to them in terms of research or practice.

v) The views regarding the programme design, content and mentoring approach were as follows:

- a) All components of the training programme were very useful as were the mix of teaching methods used.
 - b) The continued support and feedback provided by the Lead Trainers was greatly appreciated.
 - c) The Lead Trainers felt that the investment of significant time and effort in the selection of Master Trainers was worthwhile as having the right candidates was critical to the programme's success. They also believed that a key aspect of the success of the programme was the role of mentoring participants.
- vi) The Master Trainers found the Google group very useful as well as the Source compendium, which they refer to regularly, and share with colleagues and all participants at their workshops.

Challenges faced:

- There is a *great need for more resources in Vietnamese* as that is a limiting factor for the use of the free online resources. Many health service providers and medical librarians in Vietnam are still not proficient in English.
- The *quality of clinical research in Vietnam is poor* because teaching/guidance in this area is not of an international standard. As a result, research is poor and the level of Vietnamese published papers is also low, hence the relatively limited number of Vietnamese online medical resources.
- Master Trainers are faced with the challenge of *getting the participants in their workshops to engage in discussions*. The Vietnamese culture is such that individuals are reluctant to stand out and draw attention to themselves.
- A big challenge is that of the *programme's sustainability*. Reasons include the general issue of commitment, especially among the medical doctors who are Master Trainers. There is also the possibility that the very good librarians who have been trained as Master Trainers will move on to better prospects if the opportunity arises.

Plans and suggestions proposed for the future by programme participants

Several ideas were proposed by the Master Trainers, Lead Trainers as well as Heads of the participating institutions. These are as follows:

- The *training programme should be incorporated within the curricula* of institutions, and faculty and staff should be trained in accessing free online health information.
- *Such training should not only be for clinicians but for all health service providers* so that they can provide better health information to the public.

- In order *to further demonstrate the benefits of what is learnt in these workshops*, particularly in the case of doctors, they *should be shown how to apply what they have learnt to their work*.

Options suggested by Lead Trainers, for rolling out of the learning and capacity built by this programme, are:

- Option 1: Regional training programme across Asia by the Master Trainers on the topic of Reproductive Health as there is a lot of demand from countries such as India, Pakistan and Sri Lanka.
- Option 2: Meet requests for help for similar training from the Ministries of Health in Cambodia and Laos.
- Option 3: Roll out training to clinical providers in hospitals of Vietnam. This is the most realistic and viable idea to act on as a first step.

Observations:

- 1) An impact assessment at a later stage (scheduled for 12 months after the official end of this programme) will reveal to what extent the Programme Objective of influencing the entire health research and education sector is achieved as it is early days yet. Roll-out activities planned for the future will be important in this regard.
- 2) The achievements of this programme are evident on several fronts. Roll out of workshops where learning has been applied has also been successful, reaching almost 1800 users of online health information (original target 600+ users). The implications of this are tremendous if the information gained through the training is applied within Vietnam.
- 3) If there is to be further roll out of such training to medical practitioners in Vietnam, the training of Master Trainers will be critical as room for error will be minimal.
- 4) What is important for the future is that feedback provided on areas for improvement is acted upon by the Master Trainers.
- 5) Reliance of the Master Trainers on the feedback of those attending their workshops is not sufficient. A peer review system would be useful so that the other Master Trainers who have greater knowledge about online resources and the teaching skills learnt through this programme can provide feedback from time to time.
- 6) The issue of sustainability of the programme persists, particularly where Master Trainers move on to other jobs or locations, leaving a gap in the institution participating in this programme.
- 7) Cultural challenges such as the absence of the habit of reading have implications for this programme which relies on having a reading culture. Changes to this behavior will take time and are beyond the immediate scope of the programme.

- 8) The challenge of poor research papers in Vietnam and limited Vietnamese resources raises the bigger question of systemic faults or weaknesses at the academic/research level in institutions
- 9) The view of some that medical librarians need to have medical backgrounds could prove a challenge when rolling out the programme to hospitals using librarians with non-medical backgrounds.
- 10) The issue of Master Trainers planning the workshop content correctly is very important and a challenge.

Recommendations

- 1) Future programmes of a similar design should build in sufficient lead time for the careful selection of Master Trainers to meet the established criteria of individuals to undertake this role. The capabilities of the Master Trainers are important to the overall programme design and its success.
- 2) To ensure sustainability of such a programme if the Master Trainers are to train others on how to conduct such workshops, whether their colleagues or those from external organisations, an intensive approach similar to this programme should be used. Such an approach has been a significant factor in the programme's progress. However, the Master Trainers will need further guidance on how to train other trainers before they are able to do so.
- 3) Mentoring of Master Trainers throughout the programme was an important factor in their development. In future programmes, a system should be set up to enable regular feedback provision by peers as an effective form of mentoring.
- 4) To help with the sustainability issue, setting targets as a condition of giving sub-grants, such as the extent to which skills and learning from the programme is being shared, could be used.
- 5) The Source compendium should be updated at regular intervals so that it remains useful and relevant.
- 6) The immediate problem of potential users of online information being frustrated because of inability to read the English resources cannot be ignored. There is no immediate solution. A first step could be for a collective representation to WHO regarding the unmet need for health information in Vietnamese.
- 7) The principles of participatory approaches as used in this programme should be spread so that others can realise the benefits of joint planning and decision making.
- 8) To keep up the momentum of the programme, steps should be taken in the near future to act on some of the ideas proposed for the interim until plans for a wider roll out among medical practitioners, can be implemented.

1. INTRODUCTION

Background and context of the programme

In Vietnam as in many low income countries, health professionals are able to access a wide range of online health information resources. These include freely available information resources, free subscription based and subscription paid information resources. However, despite notable improvements in connectivity in many developing countries including Vietnam, health professionals and researchers still make only limited use of online information available to them and use of resources is often very low. This underutilisation represents an enormous missed opportunity and means that medical treatments and public health measures may be needlessly based on obsolete, invalid information.

This situation has arisen not from technical problems but from human ones. Local information coordinators, often university librarians, have been slow to acquire and distribute information about available resources. This has often been due to lack of capacity in terms of knowledge and skills to locate, evaluate, use and train others on using these high value information resources. There is also a general low level of professionalism and pro-activeness among librarians.

A training programme was introduced in Vietnam in 2009 by three organisations to address some of these issues by assisting in increased online health information usage by health practitioners and librarians. International Network for the Availability of Scientific Publications (INASP) in the UK, International Network for Online Resources and Materials (INFORM) in Sweden and Hanoi School of Public Health (HSPH) in Vietnam aimed to change the information culture of a sector at the practitioner level in a sustainable way by building the capacity of all key institutions to undertake their own high quality and high impact training and to actually deliver that training.

The training plan was a modified cascade system involving initial intensive training of a core team of Master Trainers. The training was led by INASP and INFORM, supported by a coordination and content expert team made up of librarians at HSPH. A further 16 people were to be selected from leading Vietnamese medical universities in the targeted areas.

Description of the programme

The workshops covered:

- Computer and internet basics appropriate to the subject matter;
- Pedagogic, presentation and facilitation methods;
- Skills on finding and accessing resources, and
- Content specific skills on using and understanding specific online information resources.

The key objectives of the programme were to:

- Get online information access and usage ingrained across the health research and education sector in Vietnam;
- Take full advantage of the online information resources that are available;
- Build the capacity of librarians and information professionals to effectively provide e-information services and training, and
- Enhance the health sector by encouraging better use of up-to-date information via online information resources.

The main activities in this programme were:

- Developing teams of expert practitioners who can collaborate and combine their knowledge and experiences.
- Supporting librarians to run and deliver a series of high-quality, high-impact online-information training workshops to over 600 health researchers, practitioners and students in participating institutions.
- Providing locally tailored training materials and supporting information resources that can be used by all participants in the programme to optimise their access and use of online health information resources. The resources included the Source compendium. This resource, which has also been produced in Vietnamese, is a detailed guide on various aspects of accessing online health information. Topics covered include finding and accessing different types of resources, and finding information on specific topics and for different professional purposes. It also advises on how to process information obtained online, for instance, how to avoid plagiarism and how to cite sources correctly.

From Autumn 2009, INASP, INFORM and HSPH started delivering a national-level, intensive capacity development training programme on online information access and use for public sector health librarians, researchers and professionals within Vietnamese universities and medical programmes. The schedule of the programme activities was as follows:

<p>March 2009: Launch of programme; First MT workshop</p> <p>May and June 2009: Second and Third MT workshops</p> <p>Oct 2009: First round of regional workshops run by MTs</p> <p>Dec 2009: Second round of regional workshops run by MTs</p> <p>Since beginning of 2010: MTs run their institutional workshops</p>
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Running over a period of approximately 18 months, 19 Master Trainers (MTs) began the programme with 16 completing the programme. They are subject-based teams of health information experts across 9 universities in Vietnam. The participating institutions are spread across the north, central and southern region of Vietnam (list of institutions in Appendix I).

The training of Master Trainers (MTs) was held in Year 1 with three national level workshops held over a period of 4 weeks spread over 4 months, attended by two participants from each institution. In addition, the national workshops were also attended by three participants from 'external' institutions that provide information services at the national level – Central Health Information Technology Institute (CIMCI), Hanoi University of Culture and National Agency for Scientific and Technological Institute (NACESTI).

Each of the institutional teams has since applied their learning by conducting workshops over a period of 1.5 years, training at least 1500 public health researchers, practitioners and students. These have been mainly their own staff and students though some have trained staff in external organisations, for example, research and medical staff at hospitals.

2. THE EVALUATION

Purpose of the evaluation

The evaluation of the training programme aimed to:

- see if the model works;
- determine if the programme has achieved its objectives;
- see if the training methodologies, particularly the intensive approach, have been effective, and
- capture lessons which can be shared with national and international development, health information and training communities.

Approach and methodology

The evaluation was undertaken in two stages. In the first stage the following activities were carried out:

- a) Review of project documents – This included training feedback forms, training videos, mentoring reports and workshop materials.
- b) Survey - An online survey for the MTs was developed in consultation with INASP, INFORM and HSPH. Some of the responses were followed up with more in-depth questions during the main evaluation.
- c) Mentoring visit – A visit was made to Vietnam in Sept-Oct 2010 to coincide with a mentoring support visit by INFORM. The purpose of this was to observe the mentoring approach used in this programme. Interviews were also held with some MTs and Heads of participating institutions to obtain their views on progress so far. Also interviewed were three participants from research institutions who took part in the initial national level workshops and an MT who left the programme in 2009.

For the second stage of the evaluation, a trip was made to Vietnam to coincide with the final programme review meeting. During this the following activities were conducted:

- a) In-depth interviews with MTs - to determine the effectiveness of the training programme, ways in which learning has been applied, the value of the learning at a personal and organisational level, and plans for future application of learning.
- b) Most significant change stories - collected from 15 MTs, capturing illustrative examples of real outcomes achieved by applying the skills acquired through the training programme.

- c) Spider Web exercise - to ascertain from the MTs what they felt had been the progress made over the lifetime of the training programme (example in Appendix 2).
- d) Interviews with Lead Partners/Trainers – The main contacts at HSPH, INASP and INFORM were interviewed to get their perspective on the performance of the programme.
- e) Interviews with workshop participants and Heads of Institutions – to gauge their views on the performance of the MTs, the programme and its benefits.

- Number of MTs interviewed = 16
- 'Participants interviewed from 'external' institutions = 2
- Number of lead trainers interviewed = 3
- Number of workshops observed during mentoring trip = 4
- Number of people interviewed who have attended workshops conducted by MTs = 17
- Number of Heads of participating institutions interviewed = 4

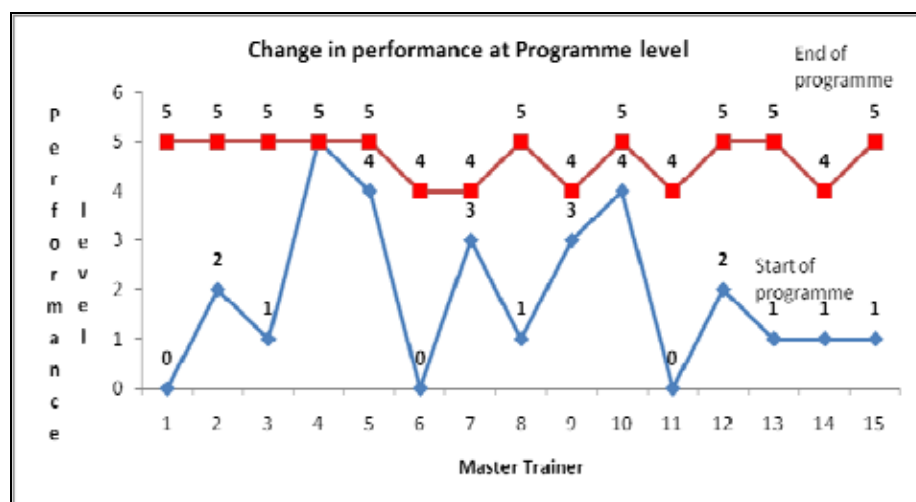
3. FINDINGS

This section presents the findings based on the interviews and exercises conducted with the various groups participating in this training programme.

Overall performance of the training programme: Without exception all those interviewed were of the opinion that the training programme was extremely valuable, not only for themselves and their institutions but for the wider health sector.

Figure 1 below reflects the MTs' perception of change in the overall programme performance, comparing the situation at the start and end of the programme period. This was scored on a scale of 0-5 with 0 = very weak and 5 = excellent. As can be seen, 10 MTs felt that the programme was below average to begin with but by the end, apart from two who felt that the programme was still at the half way point, all others felt that the performance was above average.

Figure 1



All the Institution Heads felt strongly that the programme had contributed great value to their respective institutions. It has helped undergraduate and postgraduate students, medical doctors and faculty members with their studies, research, and in the case of practitioners with their treatment of patients. The Institution Heads were impressed by the content taught and the teaching methods used, which they consider to be of a professional standard. One of the Learning Resource Centre (LRC) Heads stated that this training programme has helped achieve their objective of attracting external teachers and students to use their facilities and build capacity in accessing open source information. The Institution Heads also acknowledged some of the logistical challenges posed to the MTs such as slow internet connections within the institutions.

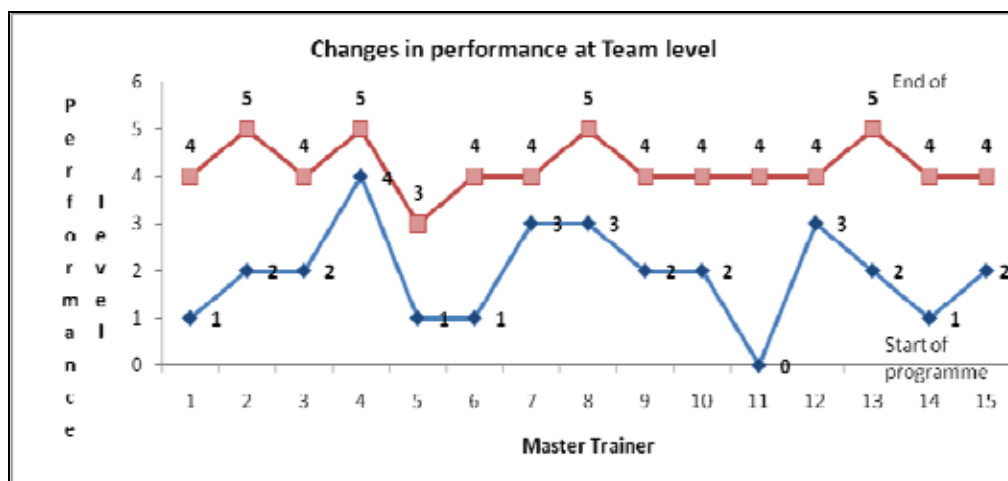
Figure 2 below reflects the MTs perception of changes over time in the way their institutions have supported the programme and how they view the role of medical librarians. 5 MTs felt that at the start of the

programme their institution's support was at an average level while the rest believed they were below this. By the end, however, apart from 2 MTs who felt the performance was a bit better, all the rest felt their were above average with 8 saying they were good while 5 felt they were excellent.

Both the Lead Trainers are very satisfied in terms of overall progress of the MTs. One of the main practices prior to the programme – that of using Google as one of the first ports of call, had been discontinued by all the MTs. The Lead Trainer felt that a good sense of camaraderie has developed among the MTs over time; there is sharing of resources and support and advice is provided to one another.

Figure 4 below shows how the MTs view changes in quality of team work at each institution. They started off with an average or below average performance (the zero score is by an MT who was not a part of the programme at the start). By the end of the programme, apart from one MT who felt that the teamwork was a bit better, all the rest felt that it was good or excellent.

Figure 2



Shortcomings:

One area that the Lead Trainers felt that they were unsuccessful with was keeping on board everyone who had started the programme. Hanoi Medical University were asked to leave due to poor performance.

Suitability of the training programme: All the Heads of Institutions strongly believe that this training programme was a good fit with the strategic objectives of their respective institutions. For example, for the head of Hue LRC the training programme serves a wider purpose; as one of his goals is to increase usage of the LRC. The training offered by the LRC MTs to external groups is a way of attracting more people to the LRC.

Gains from the programme: The MTs felt that they had benefitted from this programme on several fronts:

a) A significant gain from this programme is their *increased awareness of numerous types of free online health information resources* including grey literature. 13 out of the 14 MTs who responded to the online survey listed a significantly larger number of online sources that they now use, and graded these sources according to their level of usefulness and use. HINARI and PubMed which were used even before the training programme were cited as the most frequently visited sites, the difference being that after the training, the frequency of use increased further. One of the guest participants who attended the initial workshops conducted said that her institution had only ever used Vietnamese resources in the past. She was impressed with the technical content learnt and has passed on her learning to medical teachers she trains, particularly regarding PubMed and Medline. Similar views on the value of such training on accessing online health information were echoed by participants attending workshops conducted by the MTs.

b) *Learning how to do needs assessments* prior to the workshops *and post workshop evaluations* are valued by the MTs who now realise the importance of responding to the needs of those they train rather than assuming they know the needs of those to be trained.

c) MTs also feel confident that they *can now assess the quality of the information sourced* and determine which ones are good and reliable. They know exactly how to navigate the various websites and train others as well in the use of these. Medical students who attended workshops conducted by the MTs also appreciated the fact that they had learnt which search engines and databases provide authenticated information, which saves them a lot of time.

d) *Links with librarians in other parts of the country have become stronger* as health information is shared among them. This view was also shared by the Heads of Institutions.

e) There has been *tremendous improvement in terms of teaching and presentation skills* of the MTs. They are now able to make better presentations, speak in front of the class, make eye contact and use the right body language. Feedback provided by colleagues and the Lead Trainers throughout the programme duration has helped in this regard as has the opportunity to apply newly learnt skills by conducting workshops within their institutions and externally. The MTs say that feedback from participants attending workshops conducted by the MTs has also been useful.

f) There is a *better understanding of how to take care of all aspects of workshop preparation* including the administrative tasks, which MTs consider valuable.

The Heads of Institutions also feel that there have been **unexpected gains** from this programme:

a) The *profile of institutions has been raised* as others now know where to go for such training or for assistance with sourcing information. For example, the Vice Rector of the University of Medicine &

Pharmacy, Ho Chi Minh City, which covers hospitals in the entire province, was satisfied that the University is now known for being able to provide good information to doctors and nurses in the province.

- b) One of the Institution Heads reported that a *strong network for sharing information is being formed* as a result of this programme.
- c) One of the Heads felt that ever since the workshops have been held by the MTs, *attitude towards learning and behaving in common areas has changed* among people visiting the institution's library. They are more disciplined, creating a better environment for learning, and there is better care of common resources.

Unexpected gains according to the MTs and Lead Trainers are:

- a) Recognition by the Institution Heads that change is happening within their libraries and that there is potential to do more than assumed possible with the libraries.
- b) Two of the MTs were able to improve their English speaking skills through this programme in addition to improving their knowledge on online health information resources.

Shortcomings:

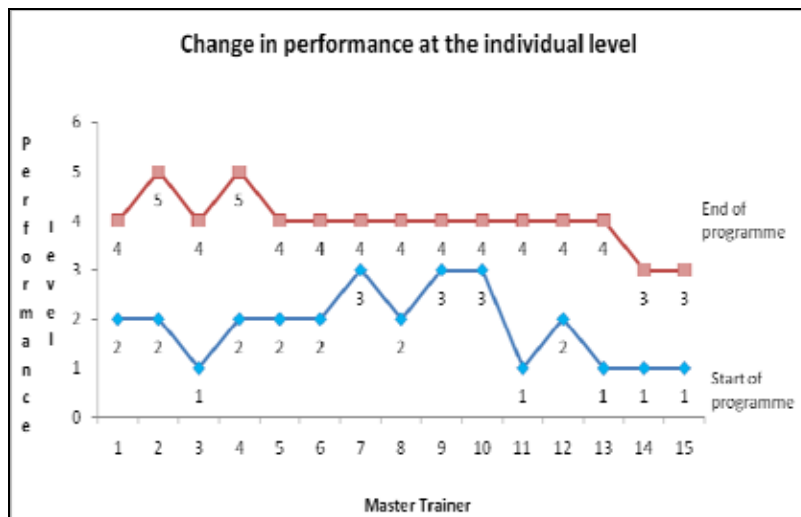
- a) While there have been gains in this Programme, one of the Institution Heads felt that more should to be done to ensure that the planning for training is more participatory in nature. This will help ensure that the needs assessments can identify more accurately what the content of the workshops should be to make the training more relevant to workshop participants.
- b) Related to the Point (a) above, Lead Trainers felt that an area that continues to be weak is that of content. They felt that MTs need to put in more effort to do research so that resources found for sharing in the workshops is more relevant or the most useful ones for the workshop participants. It was acknowledged by the Lead Trainers that getting it right requires time and practice.
- c) Some errors continue to be repeated by the MTs such as extremely long lectures, use of too many slides or using links which have not been checked in advance of the workshop. Some MTs explained that sometimes what may appear as an error by the MTs is not actually an error. For example, if there is no internet connectivity on the day of the workshop, it is not because this has not been checked in advance. Such a problem is beyond the control of the MTs as it depends on the internet service provider of the university.

- d) Related to Point (c) above, the Lead Trainers acknowledged that more practice sessions on pedagogic skills should have been done for the MTs after their initial training was completed. Some MTs had a similar view.
- e) A few of the MTs reported that capturing the attention of some students in compulsory classes can be a challenge. They do not pay attention because they are of a 'higher level' and already know the resources being introduced and so tend to lose interest in the workshop proceedings.
- f) MTs from one of the institutions said that one problem that they faced was the limited information provided about budgets available for their workshops. They felt that such information should be provided in advance of the budgets being prepared so that they can plan accordingly for the year rather than developing proposals and then having to wait to see if the budget is approved. Being asked to decrease costs later creates more work and confusion. It also makes it difficult to estimate the number of participants they can include in workshops because of this process. Added to this is the fact that because they do not know the needs of end users at the start of the process, they are unable to estimate how many more workshops will be required for a particular group in future.

Increase in confidence: Several MTs including those from CIMCI and University of Culture at the initial workshops spoke of the personal gains in terms of increased confidence as a result of improvement in training skills and increased knowledge about accessing online health information. Knowing how to make workshops more interesting and being able to capture the attention of participants also helps in this regard. This was further reflected in the Most Significant Change stories where 9 of the 15 MTs reported an increase in self confidence. One MT reported that he feels significantly more confident and at ease now when engaging in discussions with senior doctors as he knows more about the subjects being discussed. The Lead Trainers also felt that the MTs were able to deliver services and training more authoritatively and confidently and that being able to engage with special interest groups and get people to ask for more training is an achievement. Some MTs commented that workshop participants / trainees respond differently to them now and ask them for advice on locating resources. Only a few MTs admitted that they still find it difficult to control their classes.

Figure 3 is based on each MT's perception of how their skills and knowledge regarding making presentations and finding online health information have changed since the start of the programme. Apart from 2 MTs who said they were a bit better off, all the rest felt that their individual performance was above average by the end of the programme.

Figure 3



Change in perception of role of librarians/libraries: There is now *recognition by librarians of the role they play in the field of health information and the responsibility of spreading information and knowledge* to others in the medical field. This realisation helps boost their morale. They previously used to feel that as librarians they played an insignificant role in the health sector. Four MTs mentioned this as a most significant change brought about by the programme. One of the Lead Trainers who is a professional librarian also shared the view that there has been an improvement in the image of the library. It is not only that library users now receive better services and realise that fact, but also that the Heads of Institutions feel that way. A relatively small number share the view that librarians who are have a non-medical background are not able to be of much help to medical staff in searching for medical information.

Quality of training provided by MTs: Most of those who have attended workshops conducted by the MTs, whether undergraduate or postgraduate students or doctors, expressed satisfaction with the content and quality of the training, and its value to them whether in terms of research or practice. They were also pleased with the quality of the handouts provided.

The only exception was a group of doctors who had attended a workshop organised by one of the MTs. The doctors who are currently in their internship phase expressed some frustration as they sensed the value of such training but felt that what they had been exposed to had room for improvement. 54 participants attended this workshop and 68% of these were doctors. A post workshop analysis done by the Institution Head revealed that only 50% of the participants 'absorbed' the knowledge shared at this workshop. 46% applied the knowledge gained on online information searching while 25% did not apply any of the knowledge gained at all. Specific comments were:

- Many subjects covered were relevant to the needs of participants but participants were not shown how to assess the suitability of the resources.
- The workshop included practical sessions which was useful but the handouts provided did not include detailed information on how to access the sites. Later many of the participants could not remember how to access the pages they wanted and after some attempts gave up and went back to using Google.
- The Source compendium contains a lot of information but the doctors do not have time to visit all the sites suggested in the book.
- The teaching style was monotonous which made it difficult to concentrate and determine what the main points of a session were.

Despite these shortcomings, the Head of this hospital felt that such a training programme was valuable and was keen that it should be integrated within their Continuing Medical Education curriculum.

Special features of this training programme: The MTs valued this training programme because certain aspects made it different from others they have attended in the past. These are as follows:

- a) The training programme has exposed them to all aspects of preparing for workshops. They now not only know how to conduct training better, but also know how to take care of all the preparations required for the workshop. This includes preparing and sending invitations, preparing handouts, and ensuring the room and IT equipment are in place and working on the day. Though this has increased their workload, they are pleased to be in control of these processes.
- b) The Cascade model used in this Programme helps apply learning whereas other types of training programmes in the past have been mainly theory – no action.
- c) The duration of this programme is long relative to others therefore one can learn more and share experiences over a longer period.

Programme design and content; mentoring approach:

- a) The MTs felt that all components of the training programme were very useful as were the mix of teaching methods used. The online survey results revealed that while 14 MTs thought highly of all components of the training module, the modules on teaching skills and presentation skills were significantly more appreciated. The module on finding and accessing different types of resources came a close second. Some especially appreciated sessions such as the recording of MTs presentations, which were later reviewed and given detailed feedback on.

- b) Everyone was very appreciative of the continued support and feedback provided by the Lead Trainers. The MTs believed that they improved after each workshop because of the feedback given.
- c) The Lead Trainers felt that the investment of time and effort in the selection of MTs was worthwhile as having the right candidates was critical to the programme's success. Unlike other programmes where the institution selects the candidates, in this the prospective candidates underwent intense interviews by one of the Lead Trainers. The selection criteria included knowledge of English, interest in health information and experience with online information. Time spent visiting the candidates was also considered useful to determine the relationship between the MTs and their Heads of the institution library as it later helped provide support to the MTs accordingly. This understanding of 'internal politics' has also helped during mentoring visits.
- d) While the Lead Trainers agreed that the mentoring model has been time consuming, they strongly believed that some aspects need intense mentoring and so such an approach is important.

Shortcomings:

- a) The Lead Trainers felt that more should have been done to enable inter-institutional feedback as well as feedback provided by mentors. This was done to some extent but could have been better.
- b) The Lead Trainers acknowledge that limited time was spent practicing pedagogic skills. This could be partly attributed to the fact that the programme which was initially meant to be for 3 years started 9 months late. This has meant that there has been some scrunching of content which was taught in a shorter period than originally planned. Some MTs also commented that not enough time was allocated to practicing the skills taught during the national workshops.

Google group and Source compendium:

- a) Apart from one MT who felt that the Google group is used mainly for non-work related conversations between the MTs, all the others stated that they find the Google group very useful. It has been used to share new resources, experiences and to ask for content advice for medical university workshops.
- b) All MTs interviewed said that they refer to the Source compendium regularly and share it their colleagues as well as introduce the book to the participants at the workshops they conduct. One of the MTs who also teaches in English language classes has shared the Source compendium with a medical student at the class. A couple of MTs felt that while the compendium is very useful, it should be updated within a year or two so that content remains up to date and relevant.

Shortcomings:

Though the Google group is used to share resources or to ask for advice from one another, a Lead Trainer felt that exchange of information tends to be limited to topics common for all rather than on special topics as perhaps the assumption is made that others will not be able to help with suggestions or resources.

Factors that have influenced the Programme's progress:

- a) A *participatory approach* is used in this training programme which is unique in Vietnam and makes participants feel involved. The Lead Trainers can see the potential for similar programmes adopting such a participatory approach to get librarians more involved in discussions and plans rather than just be passive implementers of plans.
- b) All three Lead Trainers were in agreement that they have *worked well together within their respective areas of expertise*, with clear acceptance within the group of each one's roles and responsibilities.
- c) A critical factor for success is the *Lead Trainer from HSPH who kept up the momentum* throughout the duration of the programme. Just as crucial was the *support she received from the Dean of Hanoi School of Public Health (HSPH)*. The *support of leaders of participating institutions* has also been very important.
- d) In Vietnam, progress on any matter depends on *good relationships*. The programme's progress has been attributed to the good relations between all the MTs. The success of some MTs in promoting the training beyond their own institutions has been due to good relations that the MTs have developed with external institutions over time.
- e) Some MTs feel that while there has been good support from their Institution Heads, *limited funds* has restricted their plans, which has been frustrating.

Challenges faced

- a) While everyone appreciates the training programme and realises its value, many of those interviewed as well as survey respondents mentioned the *need for more resources in Vietnamese* as that is a limiting factor for the use of the free online resources. There is a sense of frustration that those who would find such a programme useful are limited by their ability to read documents in English.
- b) Related to Point (a) above, the Lead Trainers stated that the *quality of clinical research in Vietnam is poor* because teaching/guidance in this area is not of an international standard. As a result,

research is poor and the level of published papers is also very low. Therefore when MTs ask for more Vietnamese resources, it is difficult to provide many as good ones are limited.

- c) It was observed during the mentoring trip that attendance at some of the MTs' workshops was lower than expected. This was attributed to the fact that *MTs did not have total control over the planning of the workshops*, especially in terms of sending out the invitations and liaising with the participants. Often short notice was given about the workshop, which was probably not enough time for participants to arrange their schedules. Where doctors were the intended participants, this was particularly crucial because of their busy schedules. The MTs seemed confident that more control over these aspects would lead to a higher turnout.
- d) *Finding a common date for all students is difficult*. It requires contacting all the departments concerned. Workshops for external participants requires even more liaising with participants and the Dean of the institute concerned, which can often be a 2 month process.
- e) Some *workshop logistical aspects* such as poor training facilities, have posed challenges. For instance, one group of MTs said that their library does not have a separate room for training and so they need to spend a lot of time looking for a suitable training room in their institution.
- f) MTs say that a challenge they face is *getting the participants in their workshops to engage in discussions*. This is because the Vietnamese culture is such that individuals are reluctant to stand out and draw attention to themselves by asking questions, for instance. The Lead Trainers have offered ideas to increase the interaction of workshop participants and it remains to be seen if these are acted upon and if they produce results.
- g) In the case of students and doctors from the provinces, many have *relatively limited experience in the use of the internet*, which slows down sessions.
- h) Some MTs feel that they are *not comfortable with some of the more 'modern' teaching styles*, particularly methods to engage the participants such as use of the rap song. They admit that they have continued training in their own style.
- i) All MTs agree that while the training programme is extremely useful and should be rolled out, *finding funding for this is difficult*. INASP has paid half the cost for the roll out of this programme so that MTs can practice their teaching skills while the respective institutions have paid the other half of workshop costs. One of the MTs said that a challenge has been that so far their institution has provided the workshop venue at a subsidised cost. It would be ideal if this was obtained for free.
- j) A big challenge is that of the *programme's sustainability*. The Lead Trainers feel that there may be a *general issue of commitment*, especially among the medical doctors who are MTs. They may have limited interest in working in medical libraries in any capacity and may prefer to focus instead on medical service delivery because of the higher earning capacity. They may find the training useful

but are interested in it for personal reasons, namely, to improve their knowledge and learning on medical topics. It is difficult to determine to what extent they are interested in the library/information provision aspect. The medical doctors genuinely interested happen to be older than the rest of the group and will retire in the near future.

Though it may make sense to focus on just librarians from medical universities because of the supposed need for medical knowledge, it has been seen in general that the quality of LRC staff is much higher. Perhaps having more funds enables the LRCs to open up horizons more, train more, and have more exposure visits for their librarians.

- k) As in any programme, *reduction in human resources is a concern*. In this case it is not just a concern that doctors will leave but also that the very good librarians who have been trained as MTs will move on to better prospects if the opportunity arises. When asked to reflect on what did not work so well in this programme, the MTs stated that the loss of some MTs along the way was a drawback. The Lead Trainer who acted as coordinator of the training programme has tried to develop a friendly and supportive environment, but cannot change policies and regulation of institutions or circumstances which make MTs leave. Higher salaries cannot be given as incentive because the MTs are government employees with fixed salary structures.

Plans and suggestions proposed by programme participants for the future

As financial support for this programme is coming to an end, the participating institutions need to be looking at different ways of sustaining the programme. A significant achievement is that the MTs are already starting to think about this. Ideas that have already been proposed include charging workshop fees and looking for ways to get such training onto institutional curriculums. Such ideas give the Lead Trainers hope that the MT network could continue in the future as everyone works together on ways to spread the training programme further.

Several suggestions were proposed by various groups for consideration in the future:

- a) Every Institution Head interviewed was *committed to incorporating the training within their curriculum and training their faculty and other staff*. Some have already embarked on such a plan. In the case of PNT University for instance, training courses on research methodology are held for lecturers. Training on online health information access is now part of the curriculum to be provided to 5th and 6th year medical students. At HSPH, searching for online health information is a part of the regular curriculum. While budget restrictions prevent University of Medicine & Pharmacy, Ho Chi Minh City from extending this training to the provincial hospitals within their remit, the Vice Rector is committed to spreading it to every medical student at the University itself. As there are almost

10,000 students, it was acknowledged that reaching them all would be a big challenge and so the initial plan is to have a training course for first year students at the University.

- b) It was felt by medical students that in order to further demonstrate the benefits of what has been learnt in these workshops, particularly in the case of doctors, they *should be shown how to apply what they have learnt to their work*. Seeing how the information they obtain can be applied will be the best way of advertising the course.
- c) Medical students attending one of the MT's workshops said that *training and learning of skills such as in this workshop should be extended to other students as well*. They also suggested that *useful sites such as that of HINARI and PubMed be publicised more in University libraries* so that these are the first ports of call for medical students rather than Google. They suggested that when holding workshops for students, more books should be introduced rather than websites, as books are required for their studies while websites are suitable for research.
- d) One of the Institution Heads felt strongly that *such training should be not only for clinicians but all health service providers* so that they can provide better health information to the public. Similarly an MT felt that in future there should be more hospital library staff trained as well, not just medical university library staff.

Options suggested by Lead Trainers for rolling out of this programme are:

- Opt 1: Regional training programme across Asia so that MTs can train in different countries. This training will focus on just one topic – Reproductive Health (RH). There is a lot of demand from countries such as India, Pakistan and Sri Lanka for health information training on RH. It would be more appropriate for the MTs who are based in the region to provide such training rather than trainers from other regions.

As Option 1 will be a big programme and will take time to set up, two ideas proposed for the interim, which would be on a smaller scale are:

- Opt 2: Meet requests for help from the Ministries of Health in Cambodia and Laos.
- Opt 3: Roll out training to clinical providers in hospitals – This is most realistic and viable to do as a first step. A group of Swedish doctors will assist in putting a proposal together for funding so that such a training programme can be rolled out to the district hospitals. But in order for MTs to do such training, they will need to undergo further learning themselves. It was pointed out to the MTs by the Lead Trainers that a challenge to be faced is that clinicians ask numerous questions and want answers immediately and therefore it is important that MTs know all possible sources of information for the topic they are providing training on.

Ideas proposed by the MTs to spread the learning include the following:

- 1) Inviting participants from hospitals for training on specific topics – for small groups. At the end of the year, a seminar should be held for MTs to discuss challenges and successes during the year, to evaluate and provide new topic training.
- 2) Enrich Vietnamese resources by posting full text journals in Vietnam Journals Online (<http://www.vjol.info.vn>).
- 3) Medical library forum – for librarians from all the medical universities to meet and exchange learning and information.
- 4) Strong link between institutions and inter-library support
- 5) Train librarians from medical schools and hospitals as well as doctors and nurses
- 6) Upgrade knowledge of MTs
- 7) Expand training areas: health centres...
- 8) Develop online tutorials, online guides
- 9) Annual offline social event for librarians from different regions of Vietnam
- 10) Annual meeting for MTs to share experiences and update health information
- 11) Develop an online free health information database
- 12) Develop a standard curriculum for training in the medical field
- 13) Develop a Vietnamese medical journal index

4. OBSERVATIONS

1. In terms of the specific objectives of this Programme, Objective 1 which focuses on influencing the entire health research and education sector is not yet achieved as it is early days yet. An impact assessment at a later stage will reveal to what extent this objective has been achieved. Roll-out activities planned for the future will be important in this regard.
2. There is no denying the achievements of this programme which are self evident on several fronts – increase in self confidence as reported by the MTs and noted by Lead Trainers, the Heads of Institutions and also observed from recordings (recording of MT performances at the early stages of programme compared with that during a mentoring visit in October 2010). Roll out of workshops where learning has been applied has also been successful, reaching almost 1500 additional users of online health information. The table in Appendix 3 lists the number of workshops held over the programme period by the MTs of each institution and also shows the categories of participants who attended these. The implications of this are tremendous if the information gained through the training is applied within Vietnam. :
3. Cultural challenges: As informed by a Lead Trainer, in many primary and secondary education institutions in Vietnam, there are no libraries and so there is no habit of reading. When people reach university, libraries are of such poor quality that it does not encourage them to read. Young people also now rely on just Google. Changing to a reading culture and introducing the right 'online' behaviour will take time.
4. Vietnamese resources: The challenge of poor research papers in Vietnam and limited Vietnamese resources raises the bigger question of systemic faults or weaknesses at the academic/research level in institutions and the need for developing the quality of research though that is beyond the remit of this programme.
5. Suitability of candidates: While overall there has been appreciation of the role of the librarians and there seems to be greater acceptance of the role that they play, the view of some doctors that in order for librarians to assist them adequately they need to have medical backgrounds could prove to pose a challenge when rolling out the programme to clinicians using librarians with non-medical backgrounds.
6. Quality of training:
 - a) The issue of MTs getting the content of workshops right is very important and a challenge. If MTs do not make the effort to do sufficient research in advance, the content will not be relevant or the most useful ones.

- b) While only one group of doctors trained by the MTs was interviewed during this evaluation, what is apparent from their feedback and as pointed out by a Lead Trainer is that if there is to be further roll out of such training to medical practitioners in Vietnam, the training of MTs will be critical. Room for errors and excuses for poor performance by MTs will be minimal if training clinical practitioners.
- 7) Feedback and performance improvement:
- a) While MTs ensure that those attending their workshops complete feedback forms and these are being used to judge the ongoing performance of MTs, such feedback has its limitations. This is especially if feedback is by students (versus doctors) on the technical content of workshops. The participants completing these forms have limited knowledge about online resources and the teaching skills learnt through this programme. In that sense the students are not in the best position to be judging the performance of the MTs. It would be better to have a system which enables fellow MTs to provide feedback.
- b) On the subject of repeated errors, particularly if inaccurate content is used each time, the question arises whether such inaccuracies are because the MTs are not reviewing previous feedback they receive when preparing for the next workshop.
- 8) Given that certain errors are repeated by the MTs despite feedback being provided by the Lead Trainers, perhaps setting of standards for training delivery before MTs held their own workshops would have helped them make a conscious effort to take into account feedback provided and improve their training skills.
- 9) Google group: While it is likely that the Google group is not being used to its full potential, it would appear that even casual conversations and sharing of 'other' news among the group is helping to maintain links and a feeling of camaraderie between the group members. This is important if it helps keep the group together for now while further funding for a roll out is obtained.
- 10) Source compendium: Even though the compendium is considered useful by the MTs, based on the feedback provided by the Lead Trainers it would appear that MTs do not spend much time referring to it to look for new information resources, which they could introduce in their training. There is possibly a tendency to keep referring to what they are already familiar with.
- 11) That the MTs have gained self confidence is very apparent. What is important for the future, however, is that feedback provided on areas for improvement, whether by the Lead Trainers or workshop participants is acted upon. The Lead Trainers have already pointed out that for such a programme to be rolled out to hospitals and clinicians, the technical knowledge of MTs has to be considerably strengthened. It is not known whether the doctors at one of the external institutions who were dissatisfied by the training provided by one of the MT had made their views known to the

MT. While it is appreciated that the cultural context is such that people are usually not overly critical, for there to be improvement, some degree of candidness will be required.

- 12) Some MTs stated that a challenge faced was that of finding funding within their institutions to cover part of their workshop costs. The rationale for division of financial support between INASP and the institutions as explained by one of the Lead Trainers was that the MTs were meant to learn to manage on their own by taking on the responsibility of finding additional funding. This would be by advocating for such training to convince their Institution Heads of the benefits and effectiveness of supporting such training – not just in terms of financial support but also policy change within the institutions. The fact that this is stated as a challenge by the MTs would imply that they have not understood the need to learn to take on this responsibility and manage on their own.
- 13) The issue of sustainability of the programme persists, particularly where MTs move on to other jobs or locations, leaving a gap in the institution participating in this programme. If the learning as well as training skills is being spread to others within the institution while the MT is still there, then it should not pose a problem. It will be an issue if the programme ends with the departure of the MT and others there have not been trained. This will undoubtedly leave a gap in the institution and will be a loss on the investment made in the institution.
- 14) Some of the medical students interviewed at one of the participating institutions stated that they had so far not noticed any change in the quality of the service provided by the library at their institution. Perhaps it is too early to expect change. The Marketing session during the final workshop may now also bring about change in the overt behaviour of librarians towards library users as they engage more with them.

5. RECOMMENDATIONS

- 1) If further roll out of training is undertaken, it would be *advisable to set standards* that are to be met by the MTs in terms of technical knowledge and delivery skills. Tests could be conducted that have to be passed before they can actually deliver the training to clinical practitioners.
- 2) Future programmes of a similar design should build in sufficient lead time for the careful selection of Master Trainers to meet the established criteria of individuals to undertake this role. The capabilities of the Master Trainers are important to the overall programme design and its success.
- 3) To ensure sustainability of such a programme if the Master Trainers are to train others on how to conduct such workshops, whether their colleagues or those from external organisations, an intensive approach similar to this programme should be used. Such an approach has been a significant factor in the programme's progress. However, the Master Trainers will need further guidance on how to train other trainers before they are able to do so.
- 4) When working with doctors, *measures need to be taken to ensure that no prejudices exist against librarians*. Perhaps it could be made clear at the start that the librarians are experts in identifying the online sources on a particular topic and in navigating these sources to reach the resources. It is up to the doctors with their expertise to determine whether a resource is the right one for them rather than leaving it all for the librarian to decide. Doctors would need to appreciate that even their peers who have their respective areas of expertise would not be in the best position to advise on a resource if it does not pertain to their specialised area.
- 5) In future programmes, *a system should be set up to enable regular feedback provision by fellow MTs*. With the MTs being located in different places, this may pose a challenge though in most cases there are 2 MTs per institution who have been trained in this programme. Other challenges may also arise, for instance, a medical doctor may not appreciate feedback on performance provided by a young, non-medical person.
- 6) The institutions involved in this programme have been given mini-grants to run workshops and are being encouraged to share learning as much as possible. Perhaps *setting targets as a condition of giving sub-grants* could be used in the future to help with the sustainability issue. The target could be that each MT trains at least two other librarians or other suitable individuals from their institutions to be a trainer within a specified period. The institutions could also consider whether in the absence of a sub-grant system, MTs spread their teaching skills and knowledge if doing so is tied to incentives.
- 7) In order to remain useful and relevant, the *Source compendium should be updated after suitable intervals*. If the MT network continues, a group could take on the responsibility of overseeing this task.

- 8) Regarding Vietnamese resources, while there is hope that future generations will be more proficient in English and so not have issues with resources written in English, the immediate problem of users being frustrated because of inability to read the English resources cannot be ignored. There is no immediate solution. WHO has started producing resources in Vietnam so perhaps a first step could be for a *collective representation to WHO* regarding the unmet needs for health information in Vietnamese.
- 9) While the planning stage of a workshop can be time consuming and involves a lot of liaising with various individuals and departments in an institution, *MTs need to realise that there are no short cuts in the preparation stage* and that it is worth investing time in this as it could make all the difference to the success (or failure) of the workshop.
- 10) The MTs *should use the Google group to get help from each other on more specialised topics.*
- 11) It should be made clear to the MTs that in future if such a programme is undertaken again, in addition to delivering training they are expected to actively advocate for such training programmes and aim to gain the support of their institutions, rather than expecting such support to be provided automatically. This should be an ongoing process rather than a one-off activity. The MTs should appreciate that every institution had multiple priorities over time and so it is necessary for them to stay on the radar of decision makers in order for the training programme to continue within their institutions. The marketing and promotion training that has been provided to the MTs in this programme will help towards providing knowledge on how to promote training and associated skills development in various ways to different audiences.
- 12) As the training programme is rolled out, a special effort should be made to *spread the principles of participatory approaches* and their application to planning and decision making as was applied in this programme. This will enable more people to become aware of the advantages of engaging stakeholders from various groups in planning processes and in the execution of plans.
- 13) While the MTs and Heads of Institutions are still excited and enthusiastic about this programme, steps should be taken to *act on some of the ideas proposed in the near future* to keep the momentum going and the programme carrying on until there can be a wider roll out among medical practitioners at hospitals. During this interim period, performances of MTs should continue to be monitored and feedback provided. This can be done by their peers if need be.

6. WIDER LEARNING

- 1) Training such as in this programme, which is aimed at sustained behaviour change, requires intense monitoring, mentoring and support in order to be successful.
- 2) Cultural contexts and language issues are important factors to be considered in any international programme as the ability to respond to the local context can be a determining factor for whether or not the programme objectives are achieved.
- 3) Attitudinal change takes time but it is possible. In a training programme such as this, being able to demonstrate positive results and benefits to those who are sceptical is important so that they recognise their misconceptions and the fact that they need to change these.
- 4) Two-way dialogue is important between the trainer and trainee if the training is to be meaningful.

It would be useful to see one year on how far learning has spread, whether practices that have changed with respect to online searching of health information have been sustained, and the extent to which the original curricula might have been modified to suit the Vietnamese context.

Both MTs and Heads of participating institutions believe that the wider effects of the training programme will improve public health in Vietnam. As learning spreads to other institutions in the country and the wider medical community, they will have access to better resources which will help them improve their performance at work, which will be beneficial to the wider public. The programme has seen the start of an interesting and promising change among the medical library community in Vietnam. If the gains made so far are built on, Vietnam could provide a model for change in libraries and in online health information access behaviour in the region.

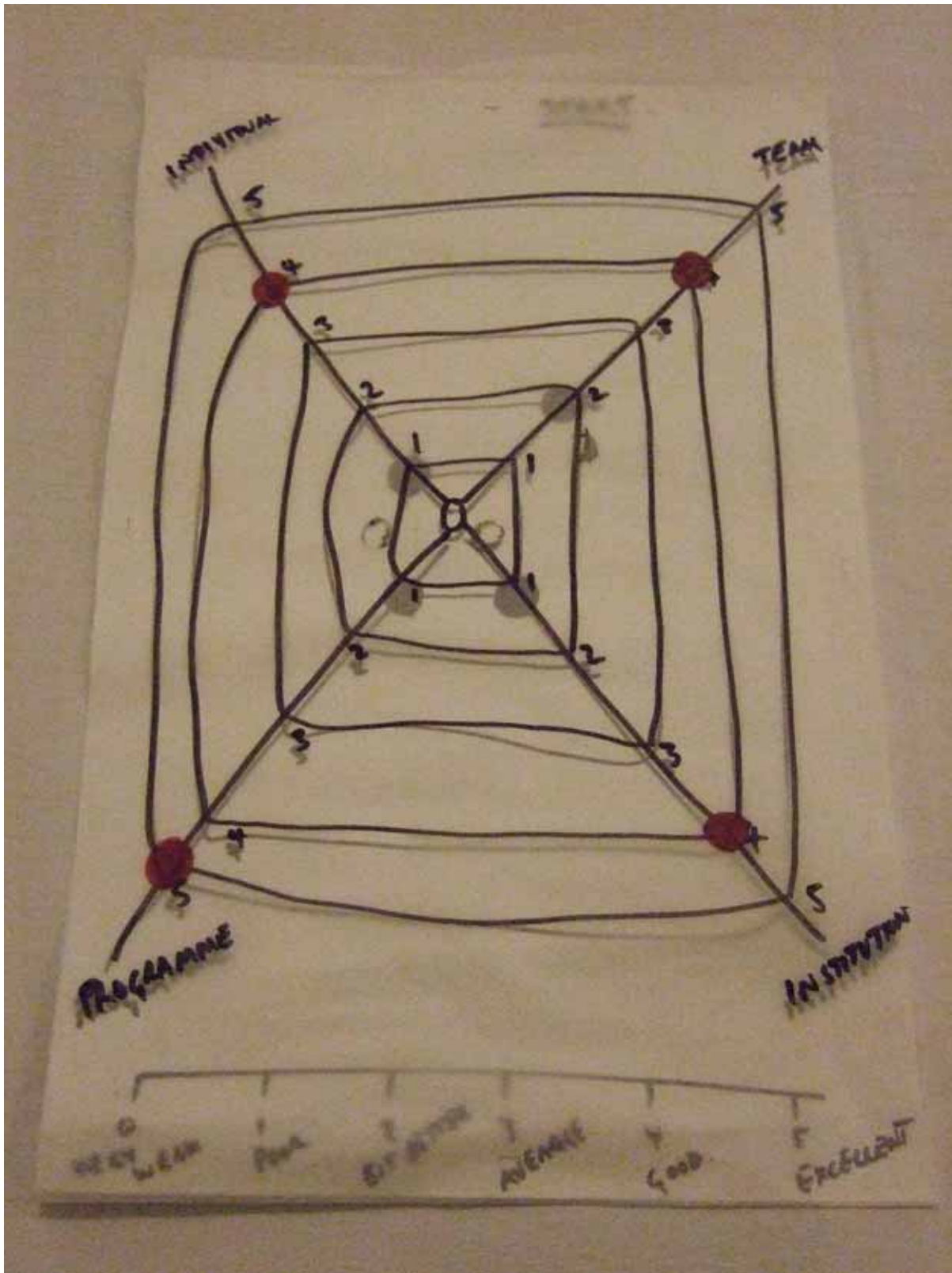
Appendix 1: PARTICIPATING INSTITUTIONS

Region	Name of institution	No. of Participants		Gender	Comments
		Start	End		
North	Hanoi School of Public Health	3	3	F = 3	Though the programme started and ended with 3 MTs, there was a change in personnel with one MT leaving towards the end and another joining the team halfway through
	Thai Nguyen Learning Resource Centre	2	2	F = 1 M = 1	
	Hanoi Medical University	2	0	F = 1 M = 1	
South	University of Medicine & Pharmacy, HCMC	2	2	M = 2	
	Pham Ngoc Thach Medical University	2	1	M = 1 (left programme) F = 1	
	Can Tho Learning Resource Centre	2	1	F = 2	
	Can Tho Medical University	0	2	F = 2	
Central	Hue Medical University	2	2	F = 1 M = 1	
	Danang Learning Resource Centre	2	1	F = 1 M = 1 (left programme)	
	Hue Learning Resource Centre	2	2	F = 2	
TOTAL		19	16		

Special group

Central Institute for Medical Science Information and Technology	1	F = 1
National Agency for Scientific and Technological Information	1	M = 1
Hanoi University of Culture	1	F = 1

Appendix 2: A SPIDER WEB DIAGRAM BY A MASTER TRAINER



Appendix 3: WORKSHOPS CONDUCTED BY THE MASTER TRAINERS

INSTITUTION	YEAR	NO OF WORKSHOPS CONDUCTED	PARTICIPANT CATEGORIES	EXTERNAL WORKSHOPS	NO. PER CATEGORY
Hanoi School of Public Health					
		5	Students of Bachelor of Public Health (Year 1-4)		101
			Librarians from medical universities and hospitals from Hanoi, HaiPhong, ThaiBinh and Nam Dinh povince		20
Thai Nguyen Learning Resource Centre					
	2010	4	Senior students		25
			Undergraduate and postgrad students		25
			Leaders of health agencies and units in Thai Nguyen province and neighboring provinces		25
			Doctors, nurses, IT staff at hospitals and health centres in the province		25
University of Medicine & Pharmacy, HCMC					
	2010	9	Librarians and teaching staff		32
			Undergraduate students		59
			Postgraduate students		141
			Undergraduate and postgrad students		38
			Provincial health workers		34
		3		Additional workshop at Nhan Dan Gia hospital	38
				Workshop in Dong Thap Province	29

				HCMC Society of Respiriology - with fee	41
	2011	4	Undergraduate and postgrad students		180
				HCMC Society of Respiriology - with fee	25
				Courses at hospitals in HCMC and other provinces	25
Pham Ngoc Thach Medical University					
	2010	6	Librarians		10
			Undergraduate and postgrad students		106
			Researchers		20
	2011	1	Teaching staff and researchers		20
Can Tho Learning Resource Centre					
	2010	4	Librarians		5
			Undergraduate students (5th year)		65
			Lecturers and graduate students		19
Can Tho Medical University					
	2010	6	Undergraduate students		118
			Teaching staff		25
Hue Medical University					
	2009	2	Librarians		8
			Undergraduate students (3rd-6th year)		40
	2010	3	Teaching staff		60
			Postgraduate students		60
Danang Learning Resource Centre					

	2010	4	Undergraduate and postgrad students	80
			Pharmacists	30
Hue Learning Resource Centre		6	Undergraduate students	110
			Teachers and postgraduate students	95
			Librarians	40
TOTAL		57		1774