

Review of the ASHM Clinical and Laboratory Mentoring Program

2008-2010, Clinical Mentoring Component

Heather Worth, December 2009



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Australasian Society for HIV Medicine



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Introduction

The Australasian Society for HIV Medicine (ASHM) has been working with the Collaboration for Health in Papua New Guinea (CHPNG) since 2003. Phase two of the collaboration began in 2008 - the ASHM Clinical and Laboratory Mentoring Program (ACLM). This program has the primary focus of providing short but regular HIV clinical mentoring visits to Catholic Health Services (CHS) sites that provide HIV testing, treatment, care and support in Papua New Guinea (PNG). The program also supports health care workers (HCW) to attend the ASHM International Short Course in HIV Medicine and Related Conditions and the Australasian HIV/AIDS Conference.

The ACLM program has a broad range of outcomes regarding the up-skilling of Catholic Health personnel to provide HIV treatment, care and support. These include the training to:

- Diagnose HIV and/or STIs appropriately in patients attending the clinics
- Assess HIV-positive patients against the WHO protocols and the National Department of Health HIV treatment guidelines
- Appropriately initiate antiretroviral therapy to clients who require it
- Appropriately interpret laboratory results when available
- Appropriately forecast and manage pharmaceutical supplies, including antiretrovirals (ART)
- Develop appropriate networks between service staff to facilitate referrals and sharing of expertise.

This report has been commissioned by ASHM to examine the effectiveness and impacts of its clinical mentoring program in CHS sites. The results of this study will be used to inform and enhance future/ongoing mentoring programs in PNG. The research examines the following areas in relation to clinical mentoring:

- Frequency of clinical mentoring visits
- Importance of having mentors visiting the sites
- Most important clinical mentoring activities for the staff
- Staff's views on mentors visiting their clinics
- Development of self-reliance and confidence to manage patients between visits
- Use of networks and referrals in-between visits
- How patients feel about being assessed by a visiting clinical mentor
- How patients feel about having their clinicians mentored
- Benefits of attending training in Australia
- How PNG stakeholders view the program
- Other activities that could be included in the overall CHPNG program
- Organisation of and communication around clinical visits and activities.

Methods for the Study

There were four main aspects to the review:

- A literature review of clinical mentoring programs in resource-poor settings was carried out
- A survey of health personnel involved in clinical mentoring was undertaken to assess the extent to which they were satisfied with the clinical mentoring services
- In-depth interviews in tok pisin (the most widely used language in PNG) with patients who have attended the CHS and have come into contact with the mentor (three in each of the four sites).
- Interviews with four major stakeholders

ACLM sites which have received more than one mentoring visit were selected for this research project. They are:

- Yampu, Enga Province
- Rabihamul, Mount Hagen/Western Highlands Province
- Mendi, Southern Highlands Province
- Tari, Southern Highlands Province

Background to Clinical Mentoring for Scaling Up HIV Care

Despite the fact that Papua New Guinea is now more than ten years into a spiralling HIV epidemic, there is still a lack of practical clinical expertise and the clinic management systems needed to deal with the complexities of caring, treating and clinically supporting people with HIV. Further, treatment is now well established in some CHS sites and more advanced treatments for conditions such as dementia are required. The lack of human resources for health is presently recognised as a major factor limiting scale-up of ART programs in resource-limited settings. In Africa, where the challenges are greatest in rolling out ART, care and support, mentoring as part of a comprehensive package of

care has helped increase the number of HIV-infected patients receiving ART (Clevenberg et al 2006). Thus, clinical mentoring can be an important tool to address the urgent need for trained PNG clinic personnel.

In general, clinical mentoring is central to the public health approach to scaling up HIV care and ART. The World Health Organization (WHO) (2005) describes mentoring as *"a system of practical training and consultation that fosters ongoing professional development to yield sustainable high-quality clinical care outcomes"*. Clinical mentoring as a vital component of a comprehensive clinical training program in HIV in resource-poor settings can help to bridge the gap between new skills, knowledge and attitudes obtained in the classroom or in mentoring sessions with HCW and the effective application of these skills in their everyday work (Grindel & Patsdaughter, 2000).

The characteristics of a good clinical mentor have been described by Huston and Marquis (1988) as a competent, experienced professional who develops a relationship with a novice for the purpose of providing advice, support, information and feedback to encourage the development of the individual. Clinical mentoring enables HCW to practise new skills in clinical settings with the support and guidance of a more specialised and experienced clinician. Intensive practical training is especially important in HIV care and treatment, given the diversity of illnesses associated with acquired immunodeficiency syndrome (AIDS) and the complexities of ART. Many HCW (and in particular, nurses) note that they need more (and on-going) training, access to up-to-date counselling tools/aids and more mentoring and support from peers and managers (Penn-Kekana et al., 2005; Rutenberg, 2003). They have also consistently identified the need for more skills in providing psychosocial care (Lehmann and Zulu, 2005; Smit, 2005). Technical training is certainly a starting point, but it must be backed up by on-going mentoring and support to implement changes in practice (Evans & Ndirangu 2009). Given that the majority of people in the world requiring treatment for HIV live in resource-poor settings, the public health approach to ART and the management of opportunistic infections is based on simplified clinical decision-making, standardised first- and second-line ART regimens, a limited set of laboratory and radiological options and a limited set of therapeutic options, making it appropriate for most resource-constrained clinical settings.

Clinical mentors in the ART context can be nationally trained clinicians but are often expatriates with substantial expertise in ART and opportunistic infections who can provide ongoing mentoring to less-experienced national HIV clinical providers by responding to questions, reviewing clinical cases, providing feedback and assisting in case management. The assignment of clinical mentoring and supervision to health workers in resource-poor settings has meant that the teams are able to scale up the clinical skills of local HCW, who have received basic training in their country through a locally developed HIV curriculum. This mentoring occurs during site visits as well as via ongoing phone and email consultation (WHO 2005).

As healthcare facilities develop the essential elements of a clinical response to HIV, building capacity and supporting staff through training, monitoring and mentoring have become critical elements for comprehensive care, and in fact is critical to building successful networks of trained HCW for HIV care and treatment in resource-constrained settings. At best, clinical mentoring fosters ongoing professional development to yield sustainable high-quality clinical care outcomes. Mentoring forms part of the continuum of education required to create competent health care providers, and forms an integral part of the continuing education process taking place at the facilities where HCW manage patients. The Ethiopian Federal HIV/AIDS Prevention and Control Office (2007) argues that the objectives of clinical mentoring are to:

- Support less-experienced national HIV clinical providers by responding to questions, and reviewing clinical cases
- Support the application of classroom learning to clinical care
- Maintain and progressively improve the quality of clinical care
- Build the capacity of first- and second-level providers to manage unfamiliar or complicated cases or refer them when appropriate
- Improve the motivation of HCW by providing effective technical support.

A number of different mentoring models have been developed and several innovative strategies, such as task-shifting and telemedicine, have been used. For a mentoring program to be successful, Paquin (2000) for the Canadian HIV/AIDS Legal Network has proposed using the following three guiding principles:

- Start with the immediate needs of frontline workers
- Develop concrete, specific, step-by-step, easy-to-use resources
- Have clinical leaders who make a long-term commitment to a developmental process.

Evaluating Clinical Mentoring Programs

Many attempts have been made to scale up the HIV clinical response in developing countries through training courses or the direct provision of HIV care by expatriates; however, mentoring as a mode of capacity-building has been claimed to have the most promise. At the same time, evidence of the success of clinical mentoring programs is not easy to come by, and there is a need to ensure that the investment in training translates into improved patient care and clinical outcomes. The International Center for Equal Healthcare Access (ICEHA) (www.iceha.org) has argued that clinical mentoring programs that are focused on healthcare capacity-building contribute positively to curbing the HIV epidemic when implemented on a national level in a developing country, in conjunction with strong government support and leadership, when there is a national continuum-of-care strategy, successful HIV-prevention programs, availability of antiretroviral medication, and strong involvement of civil society. The ICEHA mentoring program is probably the best evaluated program worldwide. It differs from ASHM's program in that it sends mentors into clinics for extended periods of up to three months at a time. Charles (2006) argues that ICEHA's model of clinical mentoring by Western-educated physicians and nurses is a very effective way to rapidly scale up the skills of local healthcare providers. An evaluation of the ICEHA program indicated progress in local clinicians' abilities in a number of areas: improved monitoring of antiretroviral medication adherence; improved management of medication side-effects and ARV regimens; and improved recognition and treatment of opportunistic infections. The evaluation concludes that clinical mentoring is an effective method to rapidly develop local expertise to provide the best HIV care possible within developing countries' available resources, and that it has a profound and lasting impact (Aggett et al 2008).

In Mozambique, because of the low uptake of prevention of mother-to-child transmission (PMTCT), it was recognised that one-week in-service PMTCT training was insufficient to support the application of clinical skills in clinic settings or to the successful integration of PMTCT services in routine mother and child health services. In response to this, a maternal child health (MCH) Nurse Clinical Mentoring Program was developed. The success of this program depended entirely on the clinical and teaching/mentoring competencies of the MCH nurse mentors and the time they had available to dedicate to this role and to implementing activities. An evaluation of this program found that selection criteria for mentors should be more rigorous and increased effort could be placed on upgrading the clinical and mentoring skills of those selected as mentors, in addition to creating conditions where they can fully assume the mentoring role. A more comprehensive training approach was needed for nurse mentors to include an upgrade of clinical skills and a "*mentoring of mentors*" strategy, based on the same training methodology used for mentoring nurse mentees (Chavane et al 2008).

In order to roll out ART in Ethiopia, I-TECH (see www.go2itech.org) and the Ministry of Health recognised that there was a need for more in-depth training on HIV and AIDS care and treatment for nurses, to facilitate task shifting and to ensure the provision of high-quality care in ART clinics. In 2005, a training program was developed to prepare nurses to expand their practice role to include the provision of ART and to further develop critical thinking skills in a comprehensive, family-centred care model. The program included on-site clinical mentoring and ongoing technical assistance. Trainees received 5 to 10 days of mentoring at their practice site annually or bi-annually, as needed, to ensure full assimilation of skills and clinical decision-making. Lessons learned from this program were: long-term, regular interaction and communication builds trust and strong relationships between mentors and mentees, and facilitates two-way learning, informal training and cultural understanding. Mentors must also have a deep understanding of the "clinical culture" of the mentee's practice to be effective. An understanding of the model of HIV care and treatment (e.g., physician vs. nurse as primary provider) within a country is necessary before designing and implementing a clinical mentoring program. Opportunities for mentors to participate in continuing education boost confidence and morale, and provide original models and ideas for clinical care and systems-improvements. Provision of clinical references, training and resources is imperative (Aggett et al 2008).

An evaluation of the effectiveness of clinical mentoring in Cambodia (Malave et al 2005) indicated that on-the-spot guidance and teachings provided by doctors and nurses from developed nations meant that Cambodian healthcare professionals were able to consolidate their knowledge about HIV/AIDS and opportunistic infections, and over time, improve their skills in the diagnosis, care and treatment of HIV/AIDS patients, including positive changes in the communication and interaction between HCW and people with HIV. The data indicated that clinical mentoring is an effective method by which to improve the knowledge and practices of health care professionals in developing countries in HIV, thereby improving the quality of care. There is a caution, however, that clinical mentoring is only effective if it is part of a comprehensive national HIV strategy and healthcare capacity-building effort.

The WHO argues that assessing the effectiveness of the acquisition of clinical skills through mentoring is carried out mostly by assessing mentees' acquisition of knowledge and skills through observation, self-report and demonstrated capacity to work through case studies or vignettes. Attitude and intent to apply knowledge and skills acquired in training are measured through participant self-assessment, action plans, interviews and written evaluations. In addition, monitoring and evaluation of the perceived satisfaction of the mentees' experience of clinical mentoring is important (WHO 2005).

WHO has developed the following indicators to assess mentoring programs:

- Number of site visits over a specified period of time for each mentor
- Number of mentor hours per month per facility
- Monitoring the knowledge and skills of mentees across a period of time
- Mentee feedback after each mentor visit
- Evaluation of individual mentors
- Appropriateness of mentor's questions or comments to the mentee concerning technical aspects of the mentee's practice
- The mentor's questions and phrasing of suggestions to the patient are appropriate in content and timing
- Review of mentors' and mentees' logbooks
- Periodical mentors' review meetings: a forum for exchange of experiences among mentors.

Although this list is not exhaustive, WHO suggest that these indicators measure how well the mentoring system is functioning, but do not measure the effectiveness of mentoring on quality of care. This was not part of the scope of this evaluation, but should be considered by ASHM for the future. At present, the reports provided by the mentors are quite descriptive, seem to be cut and pasted from previous visits and make it difficult to assess progress.

The ACLM Program

Description of the CHPNG Clinical Mentoring Program 2008-2010

The CHPNG program began in October 2003 and developed through short courses, training and mentoring until the end of 2007, when it was felt that there was a need to scale up the clinical mentoring aspect of the work. The present clinical mentoring program in Papua New Guinea grew out of discussions in 2007 between ASHM and the National Department of Health (NDoH), the PNG Sexual Health Society (PNGSHS), the National Catholic AIDS Office of PNG (NCAO) and the PNG Catholic Health Services (CHS). From these discussions, clinical training and mentoring, and laboratory support were identified as priority areas in the roll out of HIV treatment and care programs within the Catholic Health Service.

Informed by best practice and national guidelines, the aim of the program is to facilitate practical training and consultation to foster ongoing professional development of HIV health care staff through the development of tailored workshops and training programs within the project sites. The program aims to address the needs and resources identified by the CHS while using local experience and capacity. Central to the program are mentoring visits alongside training workshops. The objectives of the program are to:

- Monitor HIV treatment and care implementation capacity and identify challenges at each site
- Respond to specific on-site needs and to aid in review of HIV clinical cases
- Provide supervisory capacity for health care staff
- Help strengthen systems for continuing networks and HIV referral pathways
- Inform the content and delivery of subsequent HIV training workshops.

The program is designed to include local mentors, facilitators and presenters in order to build local capacity and sustainability of the project. Local mentors were to be selected in collaboration with the PNGSHS to accompany the clinical consultant to site visits and assist in training delivery.

The following sites, which were designated as HIV treatment sites within the Catholic Health Service, were chosen for the clinical mentoring program:

- Mingendi, Chimbu Province
- Yampu, Enga Province
- Mendi, Southern Highlands Province
- Kimbe, West New Britain Province
- Rabaul, East New Britain Province
- Rabiamul, Mount Hagen/Western Highlands Province
- Vanimo, West Sepik Province

Administrative support for the project was required by the PNG NCAO to oversee the CHPNG/ASHM project on a part-time basis, an increased amount of time for a project officer based at ASHM to coordinate and manage the program.

Activities 2008-2009

In January 2008 a visit was made to the CHS in the Highlands Region of Papua New Guinea in order to assess the clinical capacity of ART treatment sites and to inform the content and delivery of subsequent training and mentoring. The main tasks were to:

- Assess clinical data sets
- Review management of patients accessing care from the clinic
- Assess pharmaceutical stock-management systems, including stock control forms and systems to manage, store and predict future pharmaceutical stock requirements as developed at the last visit
- Assess community development and the possibility of engagement of positive people in treatment, care and support.

From that visit the following were seen as necessary:

- Rabihamul and Yampu clinics required further mentoring visits to consolidate and support the current services
- Management systems need to be strengthened to ensure regular supply of ART medications, create adequate storage for medication and to improve record-keeping in order to predict future medical stocks required
- Staff need to consolidate their knowledge and ability to manage clients with sexually transmitted infection(s) (STI)
- Newer models of care need to be urgently developed to manage anticipated increases in the workload
- Each site that is visited by CHPNG needs to be provided with an ophthalmoscope/otoscope, rechargeable batteries and a recharger.

Site	Number of visits		Mentors
	2008	2009	
Voloka Clinic Kimbe - West New Britain Province	1	2	Arun Menon Kimberly Oman
Epeanda Clinic Mendi - Southern Highlands Province	1	3	Arun Menon Stephen Rowles
St Joseph's Hospital Mingendi – Chimbu Province	1	2	Arun Menon George Kotsiou
Mother of Mercy Care Centre Mount Hagen – Western Highlands Province	2	2	Arun Menon George Kotsiou
St Mary's Health Centre Port Moresby – National Capital District	0	2	Arun Menon Emanuel Vlahakis
St Francis Care Centre Tari – Southern Highlands Province	1	3	Arun Menon Stephen Rowles
Damien Health Centre Yampu – Enga Province	2	2	Arun Menon Emanuel Vlahakis

The scope of this report does not allow for an assessment of the clinic visits other than the views of staff and patients. The mentors' reports on their visits show that there have been a number of successes and improvements in care. However, it is obvious that after two years, a number of challenges still remain. The major successes relate to patient care and the staff's knowledge and ability to manage clients with STIs. The mentors report that the patients are well looked after, appear well and are adhering to treatment. Patient records appear to be well kept. While some management systems have been improved with regard to regular supplies of medications and adequate medical stocks, there are ongoing issues with both record-keeping and supplies. In addition, caseload numbers have significantly increased since 2008. There does not appear to have been development of newer models of care to manage these increases to date, and this is a major challenge for ASHM.

Survey of Mentees Attending Mingendi Workshop

Seven out of 18 mentees attending a clinical mentoring workshop at Mingendi in July 2009 were surveyed about their experiences of clinical mentoring. One Rabihamul clinic mentee also returned a questionnaire. It must be noted that the sample is very small, so caution must be exercised when reading this data.

The data indicate that on average the respondents had three mentoring sessions, with a range of 1-9, with an average of five days spent per visit. Three of them had attended an ASHM short course.

The Utility of Clinical Mentoring

The attendees were asked a series of questions regarding the usefulness of the clinical mentoring activities and they answered on a scale of 1 to 5 (1=waste of time; 5=very useful)

Table 2: Usefulness of clinical mentoring (n=7 in each case unless stated)

Activity	Minimum	Maximum	Mean
Review patient history	4	5	4.86
Assess patient to determine WHO clinical stage	4	5	4.71
Review of adherence to ART (n=6)	3	5	4.67
Review of side effects from ART (n=6)	4	5	4.83
Review of calculating CD4 counts and other tests (n=5)	4	5	4.8
Developing individual care plans and planning further action (e.g. referral) (n=6)	4	5	4.67
Learning activities (e.g. role play) on counselling and client education	3	5	4.14
Demonstration of best practice by the mentor in the clinic (role modelling)	4	5	4.71
One-on-one teaching by the mentor in the clinic	4	5	4.86
Workshops on HIV patient assessment and treatment guidelines (n=6)	4	5	4.83

The data shown in Table 2 above indicates an extremely high level of satisfaction with the utility of the clinical mentoring program. All aspects mentioned scored highly. Other useful learning activities not included in the above, but mentioned by the participants were: discussions of treatment failure and resistance; case studies; case presentations; drugs for children; use of role play and group discussions; and home-based care.

Activities that respondents felt would be useful in the future included: sessions on second-line drugs and paediatrics; top-up repeats of courses; detailed HIV/STI training rather than workshops; basic lab training; and mental health training.

Ability of Mentees to Perform Tasks Effectively and Confidently

Another outcome of good clinical mentoring is increased ability to perform clinical tasks effectively and confidently. The mentees were asked to assess their ability to perform a number of clinical tasks after the clinical mentoring (on a scale of 1-5, with 1=waste of time; 5=very useful).

Table 3: Tasks performed effectively and confidently (n=7 unless otherwise stated)

Tasks	Minimum	Maximum	Mean
Diagnose/assess clients by WHO and National guidelines	4	5	4.71
Identify and assess complex presentations	4	5	4.71
Identify patients needing ART and initiate ART according to guidelines	3	5	4.57
Interpret laboratory test results	3	5	4.00
Review of side effects of ART	4	5	4.86
Properly document your case management	4	5	4.86
Provide client support, client education and counselling	4	5	4.71
Manage side effects, complications of ART	3	5	4.00
Forecast and manage pharmaceutical supplies including ART	3	5	3.71
Develop networks, share information and work as part of a multidisciplinary team	3	5	4.14
Train or mentor other HCW in these tasks	4	5	4.86
Cope with problems in workload and referral	2	5	4.00

Again, the participants overwhelmingly felt that as a result of the clinical mentoring they were able to perform with confidence other tasks such as recognising side effects and opportunistic infections and understanding clinical grading. Other clinical areas requiring additional practice or support were issues relating to PMTCT, second-line treatment, paediatric care, complications, co-infections (especially tuberculosis (TB)), ART resistance, toxicity and side effects, and social issues (including drugs and alcohol).

Aspects	Minimum	Maximum	Mean
Good understanding of level of capability by mentor at beginning	3	5	4.57
My clinical mentor assessed/evaluated my performance appropriately	4	5	4.43
My clinical mentor provided adequate feedback on my performance	4	5	4.43
Adequate opportunities to share our experiences and network	4	5	4.29
Adequate opportunities for continuing training and education	4	5	4.86
Comfortable in mentor visiting my workplace and observing	4	5	4.71
Length of the visits and the number of visits suit needs	4	5	4.43
Prefer longer visits on a less regular basis (n=6)	2	5	3.17

Participants were unified in their views about the suitability and skills of the mentor, with all aspects of suitability and skill scoring over 4, except for a preference for longer visits; on this the participants were divided between those who did and those who did not. Participants made comments as to the ways in which the mentor understood their level of capability, *"I was confused regarding ART, and he [mentor] helped and directed me."* *"He [mentor] questioned how we treated people living with HIV and he examined patients with me."* They also felt that the mentors have given good feedback on their performance, *"He [mentor] said I was managing my patient well without hesitation."* *"He [mentor] gave me a marked guide for me to read."* The mentees really enjoyed the opportunities provided to share experiences and network with other staff in PNG. They particularly liked case presentations and open discussion, including complex issues. They mentioned the mentors' emails and appreciated continuing training and education where they could share ideas, learn new things and recap what they had learned in the past.

To conclude, the mentees named a number of aspects of the clinical mentoring as the best aspects of program. These included:

- The emphasis on WHO staging
- The discussions of side effects and complex cases
- Networking and sharing experience
- The regular visits of the clinical mentor
- The ongoing monitoring of patients.

They would like to see more emphasis in future on the developing complexities in case management, such as second-line ART, complex paediatric care and PMTCT. They would also like the number of visits increased to three per year and the training of locals as mentors. Basic laboratory training and one-to-one teaching were also seen as important.

Interviews with Key Stakeholders in PNG

Interviews with four key PNG-based stakeholders were carried out:

- Sister Tarcisia Hunhoff, Head, Catholic AIDS Office
- Dr John Millan, President of the PNG Sexual Health Society
- Dr Daoni Esorom, Head of HIV/AIDS Section PNG National Department of Health
- Anne Malcolm, Head, Sanap Wantaim Program AusAID.

These stakeholders are members of the Project Advisory Committee. The stakeholders interviewed were all satisfied with the clinical mentoring program as a whole.

Clinic Visits

The clinic visits were thought to be very effective. The stakeholders observed that the clinical beneficiaries of the ACLM became significantly technically stronger and more confident as a result of the mentoring support. In consequence, they are more likely to treat people promptly and correctly. One stakeholder said *"[Clinics] are looking forward to the visits. They have lined up so many patients in the meantime, waiting. It has been great. Let me tell you, [without this program], it would be impossible for the patients to be treated, many of them would be dead."*

Another interviewee argued that *"the mentoring program has empowered the Catholic Health Services to actually establish and run HIV care and treatment programs in the places where the mentoring has happened. Staff are much more confident and they are happy to move forward"*. One stakeholder was pleased with the stability of the program, *"certainly I think*

having a continuity of mentors [is excellent.] The other thing that is really positive is the way that the problems can be solved, when [Dr] Arun comes to visit, on the spot, looking at what's available, how these things can be sorted through".

All key informants agree that beneficiaries of the program are more confident and technically skilled and that this results in appropriate and prompt treatment rather than patients' treatment being delayed until an "expert" arrives, creating delays in treatment, inconveniencing patients and their carers, and further jeopardising patients' health.

Selection of Mentors

There is praise for ASHM's selection of mentors, who communicate warmly and in culturally appropriate ways with staff and patients.

Three key informants referred positively to ASHM's choice of clinical mentors: "The selection for the doctors is done well. Mingendi especially has gained a lot from Dr Arun's visits, because they have also so many patients. Mingendi and Tari, Purenj, in all these places Dr Arun has been excellent....Dr Kimberly...usually goes to Kimbul. She was working in that area 20 years ago, so it was a happy reunion for the nurses, many of who remember her warmly. So there was a lot of trust and confidence, and she was also an expert in the field. So things have gone well." Mentoring is about giving help and support in a manner that the recipient will appreciate and value and that will empower them to move forward with confidence towards what they want to achieve. By this definition, ASHM's selection of mentors has been excellent, as everybody interviewed praised the clinical mentors' warmth, ease within the cultural context and lack of fuss about the sometimes spartan accommodation and working environments. It seems that the admirably committed service of the Catholic Health HIV program workers is matched by the care and professionalism of the ASHM mentors.

Improvement in Staff Capacity As A Result of the Clinical Mentoring Program

All the stakeholders acknowledged that staff confidence and technical capacity have increased as a result of the training. Two quotes are typical: "[Most important is] the confidence they have gained. Even if the doctor comes every three months or five months, they are putting people on treatment and not waiting anymore until the doctor comes." "Most of [the health care workers], when they started, had very little exposure to [managing] HIV. And, sitting with patients when they present, and initiating treatment, was very challenging. Technical capacity is something I think they've really learnt from the mentoring program. Confidence is [the] other area where they've been able to be well trained or mentored enough to carry out it on their own."

Interestingly, one respondent identified a paradoxical problem resulting from increased quality – that of greatly increased demand which limits the ability of HCW to provide the quality services they have been trained to offer.

Training Workshops

Training provided under the ASHM program seems to be an effective means of transferring knowledge to participants. "At Department of Health trainings, for most participants we try to pull them up from basically nothing and when you do a pre-workshop evaluation they score really badly. So it's a huge challenge. But for people who have been trained elsewhere, for example for people who have attended the ASHM short course or been exposed to the mentorship program, they've been trained to a certain level so they can really get value from our additional training. They start asking difficult questions and they start looking out for problems. We're able to expand on that." Training provided under the program also appears to play an advocacy role in mobilising support for the Catholic AIDS program. "When [the mentees] go to the [ASHM short course] they get a total different perspective of the whole thing. They're much more open when they come back. So it's much easier for me to work with them. When they come back from the conference they understand. They become different when they come back. So it has been positive all the way along. I have no negative comments; no, I cannot give any negative comments."

Specific Locations

While generally key informants agree that clinical mentoring and workshops have substantially improved the technical knowledge and confidence of HCW, quality of care appears to vary from site to site. This is based partly on the level of investment which has been made in facilities and in training health staff, and partly it is a function of the level of demand for HIV care and treatment. One stakeholder said: "Mount Hagen hospital cannot cope for Hagen and Wabag, and Mendi hospital as such is also not the best, although they have the clinicians and patients there. They have the doctor there, the doctor left suddenly and there's nobody at the moment as far as I know. So it would be impossible for all these people to come to Hagen. In Hagen and Rabiambul we have almost a thousand people enrolled at the clinic. And also at Mendi there many, many people enrolled. Mingendi has about 600 enrolled." Another was worried about the increasing workload as a result of training: "The skills of the mentees have increased as a result of the project. But the more well-known the service and

the training become, you have a lot of patients coming and the workload increases. So the amount of time they spend with a patient is much shorter than they used to be. As a result you compromise the quality of care and you don't spend time with the patient. The staff don't have time to interact with the patients to enable the quality of counselling and the relationships to build."

It is important to recognise that ASHM and the Catholic AIDS program are improving the quality of services in the context of a growing epidemic. The CHS will need to scale up their services, lest despite good training and people's diligent efforts, quality services are simply overwhelmed by demand – and the greatest demand would of course attach to the most popular services.

Fulfilment of the Program's Aims

Those most involved with the day-to-day operations of the program were unequivocally pleased with the results: *"ASHM came [and] gave training for our healthcare workers, to skill up our healthcare workers in HIV/ AIDS care, prevention, replaced policies, all these fantastic things....: Looking at the whole thing it has been successful. Because even if the doctor could only come twice a year, our staff upgraded and skilled to such a level that they [make decisions and provide treatment and care]. So they have been empowered to feel confident. ... I mean people are receiving treatment now, people live. People recover really. When you see some of the photos people almost in the grave and now you see them performing. Back to work and sticking out, advocates for others."*

Others acknowledge the success of the program – which is important. But with their broader focus, they note limitations, too: *"the success of the program is quite variable. Like if you ask about Vunapope that's alright because it's a low burden area. And I think they have the capacity and staff. If you ask me about Rabiambul and Yampu, my friend, the Highlands is a high burden area, and with the limited staff capacity on the ground. The mentoring was set up for good intended purposes. However, the challenges became prominent when we try to implement. We need adequate staff and adequate facilities to be able to deliver quality care."* Another stakeholder argued that *"They are doing well with consistency of visits, and of having one person building the mentoring relationships. They need to work on follow up of protocols and other kinds of support around the provision of care, and following up on treatment and treatment availability. Also on laboratory services."*

Scope for Expansion

All respondents considered that the program was important and that it provides a successful model for expansion, either within the Catholic Health Services: *"...the epidemic is growing, it's not getting smaller; we have to expand centres. ... So I would definitely hope it'll be extended for some years, because the epidemic is growing, the numbers are going up. ... Ten centres is nothing for us, we're working across the country, the church. So we have to go to other centres."* Or into the national program: *"if we can expand it to the national program it'll do a lot of good. I think the clinical mentoring program is a good program, and if it can be taken forward into the government, into the private sector... And if we can expand, I don't think it should be restricted to just the Catholic Health Services. Out of the Catholic Health Services to other churches or the private sector, and to include the government because that's the kind of model we're also trying to implement"; and "expanding the model to include other players would be useful as well, and getting it into the government".*

One of the stakeholders was more measured: *"I'd be selective in what I would do. And then what we probably need to do is sit down and look at the performance criteria. To make an impact, you need to actually implement it in a public health facility in the Highlands, like Mount Hagen. They have adequate staff, the infrastructure is there, but the most important thing they want is to make sure there's enough laboratory support. ... But then I must make sure I discuss with those to see if there's enough staff and other resources. Very critical."*

The willingness of these stakeholders, who are senior national programmers and policy makers, to seriously consider using the ASHM clinical mentoring program model as a blueprint for national expansion either within or outside CHS, indicates that while they may not think the program is perfect in every way, they hold it in very high regard.

Suggested Improvements

Two types of improvement were suggested by one stakeholder: *"I'm happy with the current arrangement. There are two things [I'd like improved]. One, I want [the mentoring program] to be driven by the needs of the site, and the capacity of the staff, because different clinics have different levels of demand, and different staff have different capacity development needs. Number two ... the time [taken for mentoring visits] is too short. How do you expect to develop capacity in short trips from overseas...relationships take time, there needs to be constant interaction between the mentor and the mentee, and these things build over time, the confidence, everything. And don't forget that because of our limited capacity, the health staff moves."*

Patient Interviews

Twelve in-depth interviews were carried out with patients (7 men and 5 women) who had seen the mentor in the Yampu Health Centre in Wabag, the Epeanda Health Centre in Mendi, St Francis Centre in Tari and the Rabiambul Centre in Mount Hagen. The interviews were conducted in the local language; tok pisin (except for one in tok ples) and were carried out by a Papua New Guinean-trained researcher. The interviews focused only on their experiences of the visits of the mentor to the clinic. All patients were extremely positive about the clinical mentoring program.

Good Medical Treatment

All of the patients described how much better they felt after they had been examined by the mentor. Many of the comments revolved around medication. For example, Mabel¹ said, *"When he comes and gives medicine and we feel happy...nothing bad has happened to my body. I am well."* Mason commented that the doctor *"checked me very well and he said, 'the head of the baby is present and I won't change your medication.'" "I got on the new drug through the doctor. ART has helped me a lot. I am in good health, strong and through this new drug my family is happy to be with me,"* Bob reported.

A number of patients also commented that they would have died if it had not been for the doctor's visit: *"His work here is good. Before, when I first got infected I lost weight and got malaria, but when the Dr came and checked me he changed my medication and my skin got better."* (Angela). Mason said, *"If I had changed the medication, the baby would have been killed. I might have lost my life as well!"* Bob argued that before getting his medication, *"for one year I stayed in bed. I never took the ART so I almost died. The Dr came to visit me in my house with Sister... He worked on me and told me to take the new drug. The new drug has helped my health a lot."* When Elsie first got infected, she *"only thought of death but Dr ... came and gave me medicine and now I think of life."*

It is not just being examined and having better medication that makes a difference to the patients. They also talked about lifestyle changes as a result of the mentor's advice. *"I like the advices he gives... he gives us good advices like eat properly, wash food every time"* (Mabel). Martin said, *"Before I met [the doctor] I was very sick. Since I met him, he told me not to smoke or chew betelnut. I quit at once and my cough slowly went away. I do not feel chest pains anymore. His advice has helped me a lot."* Another comment from Elsie was that, *"He teaches us to live properly and now we live with happiness."* Mental health issues were also mentioned: *"He gives hope to sick people and makes them stronger and live positively."* (Martin)

Good Character

It has been argued elsewhere that empathy with patients and the ability of an Australian doctor to mix with local patients is a recipe for success of a mentoring program. This is very much the case in Papua New Guinea. Many of the patients talked about the doctor's character. Mason said, *"We sit together, story together, eat together, how he treats us we really like him."* For Bob, while the doctor sees a large number of patients *"I feel that he comes only to check me. Others use gloves to check patients but he uses his bare hands. When he does that I thought that he's a very concerned person. That's why I am happy it's him [that comes]."* Mabel said, *"He hugs us and tells stories and makes jokes and we sit together."* A number of patients mentioned the doctor's tiredness, and his concern. *"He comes and tells us that it's like this and he tells us that we must live like this. And to sit with him; it's good to stay with him because some other man won't come but [he] sacrifices his time to come stay with us and talk with us"* (Sue).

One of the interesting findings from this evaluation was the level of medical literacy that patients had acquired. They could talk about their drugs, their side effects and the changes in their body. For example, Joseph said, *"The new ART and septrim we are taking now is new to some of us unlike the previous ones. The doctor put us under medication such as stavudine, nevilast. ... I want a CD4 to show the state of our blood and body. This is my concern..."* This issue of improved medical literacy has been discussed in Australia and elsewhere but literature on such a finding in resource-poor settings was not able to be found.

Patients in Remote Areas

For those in remote areas, it is a struggle to be at the clinic when the doctor comes. Ben commented, *"Before [the doctor] comes they put a notice of his coming in the clinic and people who can afford to, make their own way to the clinic... People living around ... have easy access to him...Some patients live in very remote parts of the province. When they miss out they have to wait til his next visit."* Francis felt very happy when the doctor came, *"As I am from a remote place, I feel happy*

¹All interviewees have been given pseudonyms

because here a doctor is hard to find." Mason said, "some of the patients are not from here so they miss out". Added to the problem of access for patients from remote areas is the cost associated with travel to the clinic: "Sometimes it's the bus fare problem that means that people don't come to see the doctor" (Joseph). For Ken, "the bus fare is a real problem as I come from afar so I decided to come and stay in.... for three days waiting."

Patient Needs

The patients were vociferous about their needs. Four people spoke of the need for a CD4 machine. For example, Mabel said, "We must have a CD4 machine here so we can check ourselves." Five people spoke of the need for more staff. Bob commented that "The Dr goes around by himself. If there are other workers who could work alongside him it would be so much better. Sometimes he is very tired and exhausted and he has to travel again." Sue and others felt that there should be a full-time doctor, and others felt that they needed more frequent visits and so the number of mentors must be increased. Sue had the idea that maybe HIV-positive people could be trained to be lay health workers. She said, "This is thought I have had. They must teach us more about this medicine because in the future maybe nurses won't be available – so then who will give our medicine to us? We need to do something about that – maybe we should attend some kind of school to get ideas about the medicine."

Stigma

The patients were very aware of stigma attached to HIV status and by inference to ART roll-out. Mabel said of HIV-positive friends of hers, "I think about saving their lives but they feel ashamed to come here...Shame is the factor that makes them hide. I see a lot of people stigmatising and discriminating a lot. They point their fingers so [HIV-positive people] go home worrying." People were afraid when the mentor first came that he might tell others about their status. Mason commented, "When they brought [the doctor] here, at first I thought, our names will appear in the Post Courier [the national newspaper], that's what I thought... He takes photos so this created the thought. But he said, 'no, I will treat you with medicine.. and I realised that he was that kind of man [a good man]".

Conclusion

Staff, patients and key stakeholders all felt that the clinical mentoring program has been important and successful in building the clinical response to HIV in Papua New Guinea in the Catholic Health Services. The program succeeds in no small part because of the dedication of the mentors – both in the transfer of clinical skills and the kindness shown to patients. As well, the commitment of the CHS to improvement of services plays an important role in the success of the program.

There are obvious gaps in services. Major challenges include:

- A need for better record-keeping – both in the collection of clinical data and in medical supplies. Some of the gaps in equipment and medications are because these can be in short supply
- Some clinics are overwhelmed by the growing numbers of patients over a very short period of time, without a concomitant increase in staff. Added to this is the growing complexity of HIV clinical issues as patients are on ART for longer periods
- No local mentors are being trained at present. This is a difficult issue, given that PNG has a dearth of HIV doctors and to pull them from their already busy schedule to travel for up to a week may not be the best use of such a scarce resource
- There is a need for better monitoring and evaluation of the mentors themselves. This was not in the scope of this review, but could be somewhat achieved by better reporting forms

References

- Aggett, S., Shantz, K., Mair, R. & Charles, M. (2008) Clinical mentoring: a sustainable strategy for scaling up HIV/AIDS clinical expertise in developing countries *Journal of the International AIDS Society* 2008, 11(Suppl 1):p229.
- Charles, M., (2006) ICEHA's clinical mentors: Impact, Scale, Leverage, Sustainability, and replicable.... Global Health Council, International Center for Equal Healthcare Access.
- Chavane, L., Chongo, L., Porto, F., Butler, I., et al (2008) Mentoring of Mentors: A Critical Component of the Clinical Mentoring Strategy in MCH in Mozambique. http://www.go2itech.org/resources/publications-presentations/abstracts-by-i-tech-authors/Abstract_PTV_IMNamibia%20English_June09.pdf
- Clevenbergh, P., Van der Borght, S.F., van Cranenburgh, K., et al (2006) Database-supported teleconferencing: an additional clinical mentoring tool to assist a multinational company HIV/AIDS treatment program in Africa. *HIV Clinical Trials* 7(5):255-62, 2006 Sep-Oct 7(5).
- Evans, C., & Ndirangu, E., (2009). The nursing implications of routine provider-initiated HIV testing and counselling in sub-Saharan Africa: A critical review of new policy guidance from WHO/UNAIDS. *International Journal of Nursing Studies* Volume 46, Issue 5, May 2009, Pages 723-731.
- Federal HIV/AIDS Prevention and Control Office, 2007 Guideline for HIV Care/ART Clinical Mentoring in Ethiopia, Ministry of Health, Ethiopia.
- Grindel, G.C., & Patsdaughter, C., (2000) Coming Full Circle: Mentorship in HIV/AIDS Care. *Journal of the Association of Nurses in AIDS Care*, Vol. 11, No. 6, November/December 54-63.
- Huston, C. J., & Marquis, B., (1988) Ten attitudes and behaviors to overcome powerlessness. *Nursing Connections*, 1(2), 39-47.
- I - T E C H, (nd). Project Profile: Ethiopia Clinical Mentoring Program: Field-Based Team Model. <http://www.go2itech.org/where-we-work/ethiopia/downloads-folder/EthiopiaClinMenProfile.pdf>
- Lehmann, U., Zulu, J., (2005) How Nurses in Cape Town Clinics Experience the HIV Epidemic People's Health Movement, *Critical Health Perspectives*, www.phmovement.org.
- Malave M., Charles M., Boyle B., Mayer K.H., Vun M.C., Schechter M. (2005) The Effectiveness of Clinical Mentoring as a Method to Improve HIV/AIDS Clinical Skills of Healthcare Professionals in Cambodia. *IAS Conf HIV Pathog Treat* 2005 Jul 24-27;3rd: Abstract No. Mope11.7c10.
- McCarthy, E., O'Brien, M. & Rodriguez, W. (2006) Training and HIV-Treatment Scale-Up: MORE DETAILS HERE?? MISSING TEXT//
- Paquin, M-J.M., Lambert, A., (2000) The Collaborative Project: An Effective Canadian Partnership in HIV/AIDS Nursing Care *Journal of the Association of Nurses in AIDS Care* Vol. 11: 4, July/August, 57-64.
- Penn-Kekana, L., Blaauw, D., San Tint, K., Monareng, D., Chege, J., (2005) Nursing Staff Dynamics and Implications for Maternal Health Provision in Public Health Facilities in the Context of HIV/AIDS. *Frontiers in Reproductive Health*, Population Council, Washington, D.C.
- Rutenberg, N., Baek, C., Kalibala, S., Rosen, J., (2003) Evaluation of United Nations Supported Pilot Projects for the Prevention of Mother to Child Transmission for HIV. UNICEF and Population Council, New York, <http://www.popcouncil.org/pdfs/horizons/pmtcunicefevalovrvw.pdf>.
- Smit, R., (2005) HIV/AIDS and the workplace: perceptions of nurses in a public hospital in South Africa. *Journal of Advanced Nursing* 51 (1),22-29.
- World Health Organization (2005). WHO recommendations for clinical mentoring to support scale-up of HIV care, antiretroviral therapy and prevention in resource-constrained settings. "Planning Consultation on Clinical Mentoring Approaches and Tools to Support Scaling-Up of Antiretroviral Therapy and HIV Care in Low-Resource Settings, Geneva, Switzerland, 7-8 March 2005 : Working Meeting on Clinical Mentoring Approaches and Tools to Support the Scaling-Up of Antiretroviral Therapy and HIV Care in Low-Resource Settings, Kampala, Uganda, 16-18 June 2005".