

WEB PAPER

Child health in the West Bank: Experiences from implementing a paediatric course for Palestinian doctors and nurses working in primary care

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Abstract

Child health issues are of high importance in the occupied Palestinian territories, where half of the population are children. The Royal College of Paediatrics and Child Health have developed a comprehensive paediatric training programme for primary healthcare providers with the aim of improving child health in the area. The course has taken 8 years to develop with the pilot running in 2005–2007 and is now being extended to other centres in the region. In this article, we describe the process through which this course has developed, some of the difficulties faced and the final teaching programme as it has evolved. A number of lessons have been learnt, over the years, which are of potential value to others designing similar teaching programmes. Its greatest strength lies in the partnership developed with local paediatricians, which encourages us to believe that sustainability has been achieved. Evaluation confirms that the course is meeting the needs of local doctors and nurses and improving their paediatric skills. Although developed specifically for the occupied Palestinian territory, our experience offers a process and design for a teaching programme that could be adapted for use in other countries around the world.

Introduction

Since 1997, the Royal College of Paediatrics and Child Health (RCPCH) has developed its international work thanks to the moral and financial backing of members. Through the inspiration of the College's first President, the late Professor David Baum, a training course was developed for health professionals working in primary health care in the occupied Palestinian territories (oPt). In this article, we describe the processes involved, and the lessons learnt from setting up the teaching package. The course is now running in two centres with further plans for a step-wise expansion.

Health educational programmes in developing countries

Continuing medical education of local healthcare professionals provides a potentially widespread and prolonged impact on healthcare for relatively low cost to the aid agency or organisation. This is especially true if local trainers are trained in educational methods and course materials, so that the course can subsequently be delivered locally. By educating professionals, it is hoped not only to improve their personal practice but to disseminate good practice through the health centres and departments in which they work.

Practice points

- It is crucial to identify the learning needs within the local healthcare system.
- Aim to design a course in partnership with local professionals.
- Empower local tutors by providing training and support in educational practices.
- Aim to strengthen the partnership between local health professionals by developing group teaching to doctors and nurses.
- Use an online forum to provide an additional clinical and educational support network.

The majority of educational courses run in low-income countries by international agencies focus on specific topics such as breastfeeding (Kutlu et al. 2007), tuberculosis (Awofeso et al. 2008), malaria (Nsimba 2007) or HIV (Kessou et al. 2006) or are short courses such as Integrated Management of Childhood Illness (Prosper et al. 2009) or Emergency Maternal, Neonatal and Child Healthcare (Advanced Life Support Group n.d.). There are few courses specifically designed in line with local health professional needs that span over months or years and lead to a formal

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qualification. The Australian Diploma of Child Health (DCH; University of Sydney 2009) is similar in duration, but is mainly delivered through recorded lectures from Sydney rather than local tutors giving face-to-face teaching.

Child health in the occupied Palestinian territory

The oPt comprises two separated areas – Gaza and the West Bank (including East Jerusalem). Since the Second Intifada (uprising) in 2000, poverty has dramatically increased together with difficulty in accessing jobs, schools and medical care (Giacaman et al. 2009). There is significant morbidity and mortality mainly amongst the young population of the oPt (of whom 46% are less than 15 years old; Palestinian Central Bureau of Statistics 2008). Current under-5 mortality, although decreasing, is four times that of the UK (22 per 1000 *vs.* 6 per 1000; UNICEF 2008). Despite immunisation rates being high (90–100%), it is estimated that 10% of under-5s are chronically malnourished, with an anaemia rate of 38% (Palestinian Central Bureau of Statistics with Birzeit University and UNICEF 2003) and vitamin A deficiency rate of 70% (Salman 2004). Studies have shown that 55% of children experience one high magnitude traumatic life event (Khamis 2000) with approximately 33% of children suffering from acute post-traumatic stress disorder within Gaza (Qouta & Odeh 2004).

Primary health care in the oPt is provided from four sources: government services run by the Ministry of Health (56%), United Nations Relief and Works Agency (UNRWA; 3.9%), non-governmental organisations (36%) and private-for-profit clinics (World Health Organisation 2008). These organisations also provide secondary and tertiary health services with over 40% of healthcare funding coming from overseas aid. However, restrictions on movement due to checkpoints and the security barrier make access to these services difficult (World Health Organisation 2008). Whilst there are now two medical schools in the West Bank, most primary care doctors were trained overseas in former Eastern European or Arab states and have not had access to postgraduate training, specific to their needs within the oPt.

Course development

The Palestinian Child Health Diploma has taken a number of years to develop. There are key stages in the development process that could be used as a model to develop courses in other countries (Figure 1).

Needs assessment

In 1998, Medical Aid for Palestinians (MAP), a British non-governmental organisation, approached the Palestinian Ministry of Health and RCPCH to suggest the development of a teaching programme initially aimed at paediatricians in training. In response to this the UK Department for International Development (DFID) funded a needs assessment involving the Ministry of Health, organisations providing healthcare and doctors and nurses within the oPt (White et al. 2000).

This found that the primary focus of the work of practitioners was curative rather than preventive care and there was little use of guidelines for practice and integrated care. As most, children are first seen by primary care professionals, targeted teaching to this group would have a greater effect on child health. Deficiencies in quality of care at primary care level, particularly in the government sector combined with restriction of movements resulted in a low quality of overall care and resulted in an increased pressure on secondary care services. Therefore a need for training in primary care paediatrics was identified, with the aim of increasing quality of care and reducing onward referral.

In consultation with the Ministry of Health and local paediatricians, it was agreed that the RCPCH would assist in setting up a comprehensive paediatric training programme for primary care providers. As nurses have a pivotal role running rural clinics and delivering preventive care, they were included in the course.

Development of the curriculum

A group of interested UK paediatricians were brought together by the RCPCH to develop a comprehensive modular teaching programme based on local health needs with a community orientation. It was decided that a holistic bio-psycho-social, rather than solely medical, approach would underpin the curriculum, and the framework for the modules would take a problem-based approach with paediatric conditions linked by their mode of presentation rather than by organ system. The modules would incorporate local guidelines and experience, e.g. growth and nutrition and child protection. Table 1 shows an outline of the 11 modules that constitute the course.

Module design and delivery

The aims and learning objectives for the modules were decided by the UK team of tutors in consultation with a medical educator (Table 2). Each module was then drafted by a UK tutor, and sent to local tutors who commented, revised and adapted the materials. This input significantly moulded the modules and ensured that they were relevant to local needs (Figure 1). The initial design was for each module to consist of four 3-h face-to-face sessions led by the local tutor. Students were required to prepare for each session, by completing a variety of tasks, including collating cases seen in clinic, Internet/journal reviews or textbook work. Group learning also provides an opportunity for otherwise isolated doctors to meet and exchange their knowledge and experiences.

Resources

The preparatory tasks in the early modules were mainly Internet based. Internet services were not available everywhere and we found that the tasks took too much time. Participants are now provided with a core textbook (Rudlof & Levene 2006), a module book outlining the preparatory work, course sessions, and in view of the difficulties of Internet connections, all materials required for the module, including DVDs and journal articles.

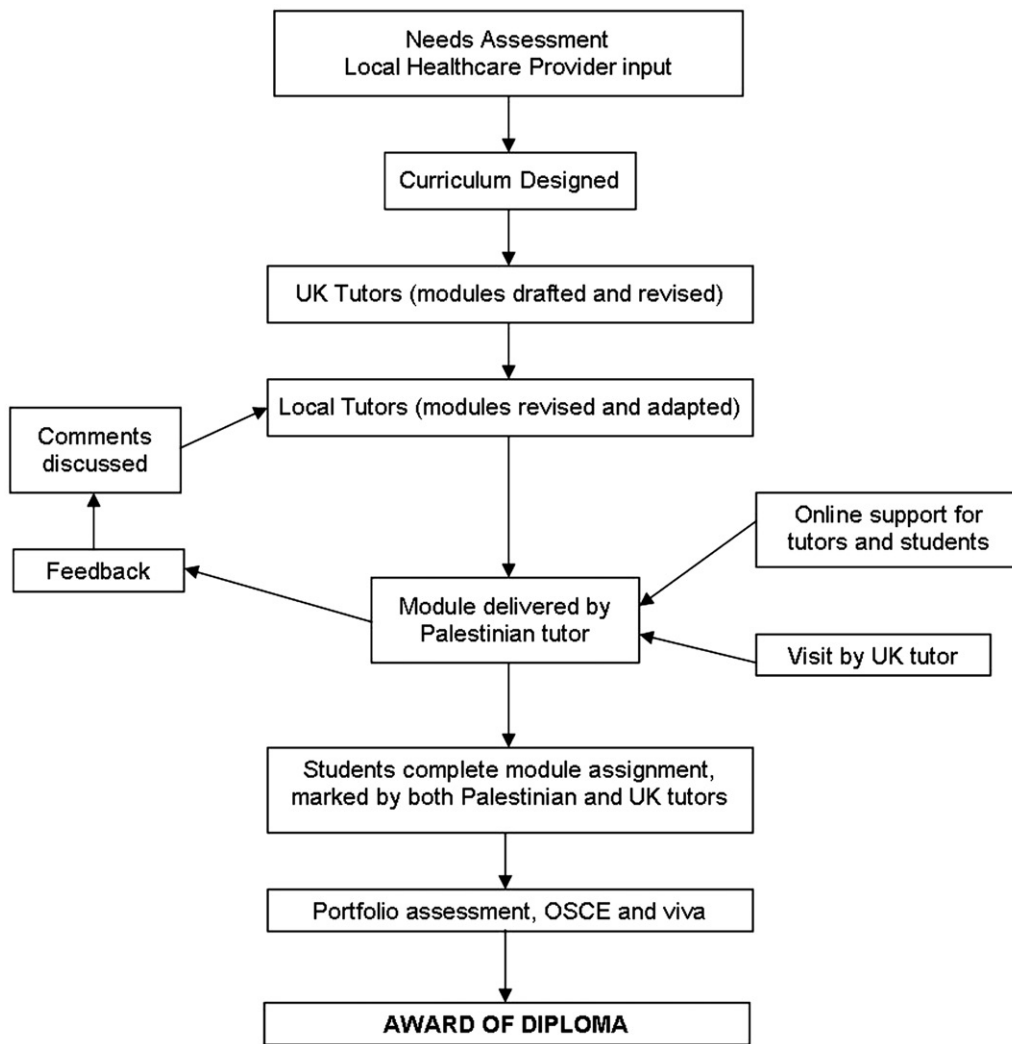


Figure 1. Model of course design and development.

Table 1. The 11 modules comprising the diploma course.

Module	Focus
Clinical skills	Competence in clinical evaluation of children
Acute paediatrics	Accurate diagnosis and management of common acute diseases of childhood
Chronic conditions in children	The impact chronic illness has on children and families; management of common chronic conditions
Emotional and behavioural health	The emotional development of infants, children and adolescents; family and society factors; parenting; common problems encountered in primary care
Growth and nutrition	Nutritional requirements of babies and young children; common problems in primary care; growth monitoring; causes of poor growth
Neonatal care and child development	Care of the newborn in the primary care setting; common conditions; psychomotor development and its assessment
Medical emergencies in children	Recognition and management of paediatric emergencies in primary care
Genetics and disability	Common genetic conditions in the oPt; childhood disability and its impact on the child and family; care of the disabled child in the primary care setting
Child protection	Recognition of neglect and abuse; assessment and appropriate action in primary care
Common and recurrent problems of childhood	Diagnosis and management of persistent and recurrent symptoms
Promoting child health	Health promotion in the primary care setting; concepts of children's rights; evidence-based health care

We did, however, continue to develop an Internet-based, password-protected resource (www.palestine.rcpch.ac.uk) for the use of participants and tutors. This included course materials and a forum for discussion between participants,

local and UK tutors. There is also a secure area for tutors to mark assignments. Participants feel isolated in their communities and the forum has proved popular providing support from tutors and a link between primary and secondary care.

Table 2. Example of aims and objectives (chronic illness module).**Aims of the module**

To explore the issues of living with common chronic conditions in childhood and to develop an approach to their management

Objectives

By the end of this module you will:

Know

- The basic epidemiology of common chronic conditions including asthma, epilepsy, cancer, arthritis and heart disease in Palestine
- The principles of treatment and management of these conditions

Know how to

- Inform and explain to children and families about the nature of these conditions and their management
- Treat these conditions as appropriate in the primary care setting

Appreciate

- How the common chronic conditions may impact on the child and family
- That a good history and accurate examination are essential to making a diagnosis
- That a bio-psycho-social approach is a requirement to understanding and managing these problems
- That good communication with the family is particularly important when a child has a chronic condition

Local tutors

The initial intent was for the course to be based on self-directed learning, with a facilitator assisting the student groups to work through the materials. However, this proved to be unrealistic and provided no opportunity for local paediatricians to participate and give their local knowledge, experience and enthusiasm to the course.

Local tutors, who were skilled paediatricians with different backgrounds and experiences were identified and they attended a 3-day training of trainers medical education course in Ramallah, delivered by two UK paediatricians (MR and TW) to ensure that the tutorials would be taught in line with the ethos of the course. The tutors provided a connection with local paediatric problems and experience, answered participants' queries with a knowledge of local services and systems, helped with the translation of difficult English terminology, evaluated the participants, marked the assignments and made the course a sustainable and valuable resource in the oPt. Without their enthusiasm and drive, the course would not have achieved the success it has.

Before and during each module, the responsible UK tutor was in regular contact through the online forum with the local tutor and participants providing any additional last minute support. Periodically, UK tutors visited the oPt during their module to discuss any issues face to face and obtain feedback on the sessions to aid future module development. It is envisaged that, in the future, these visits will become less frequent as local paediatricians and agencies take on greater ownership of the course, and contact can be maintained by Internet and videoconferencing.

Selection of participants

Selection criteria for participating in the course were set by the RCPCH and included working in child health, a motivation to learn and a reasonable command of the English language.

Local tutors and service managers performed the selection process resulting in 10 participants from across the spectrum of healthcare providers in the oPt. Two senior nurses were included, not without opposition from the doctors, as it was felt that they might struggle in the more clinical modules. However, the nurses on the pilot were keen to participate in these modules and the feedback they provided throughout was positive. Their results have been comparable with the doctors in the group.

Pilot

An initial pilot of three modules was run with a pause to collate feedback and implement ideas in the next modules. Early local evaluation with tutors and candidates raised a number of important points that guided later module design. Modifications in the subsequent eight modules included:

- Ensuring better reflection of local practices and needs by content
- More time for each session and an additional session in each module to allow for discussion and 'wrap up'
- Less dependence on Internet access
- Focus of the reading materials on guiding students with limited time outside the course
- More case-based learning with real scenarios and management discussions
- Provision of specific guidelines rather than 'an approach'
- Clearer concise instructions for module assignments

In the light of this feedback, sessions were extended to 4 h and each module to five sessions. Case-based teaching has become the primary method of teaching using a wide range of UK and local audio-visual aids. Feedback from subsequent modules has been extremely positive. Overall, the participants have thoroughly enjoyed the course; they feel they have learnt many things and continue to support the project. Local tutors and other paediatricians suggested expanding the course to include paediatric residents by incorporating it in their formal residency programme taught at teaching hospitals and this has commenced at the Makassad Hospital (tertiary centre) in East Jerusalem in 2008.

Assessment

Participants are assessed in each module by their participation, their preparatory work and an assignment or an examination. This is set by the UK tutor and initially marked by the local tutor, with quality review of a sample of the assignments by UK examiners (MR and JB). Throughout the course, participants are required to keep a portfolio of their professional learning and this is reviewed together with an oral examination at the end of the course. This concept has been new to all the students and many had difficulties with reflective learning, but the portfolio has generally been felt to be a valuable addition.

Certification

A tension arose regarding certification. Our aims were explicit – to improve child health in the oPt, and funding was provided

by DFID to this end. Following extensive discussion it was decided that, as the current UK DCH awarded by the RCPCH was not directly applicable to the course nor appropriate for nurses, a 'Certificate of Child Health' would be awarded. This caused considerable discontent amongst the participants who understandably wished to gain an internationally recognised qualification and felt that a 'certificate' did not adequately reflect the amount of work involved. Happily a resolution has occurred. On surveying Child Health Diplomas run through universities in the UK, we came to the view that our course involved an equivalent amount of contact time and work. As a result, the RCPCH has approved a change of the award to the 'Palestinian Child Health Diploma'.

Implementation in the Middle East

In practice, it has taken 8 years and a great deal of hard work before the course successfully ran between 2005 and 2007 (Waterston et al. 2009). There were a number of reasons for this lengthy gestation.

First, the local politics: there were a number of organisations involved, such as the Ministry of Health, DFID, MAP and other healthcare providers, as well as two Palestinian universities; there were disagreements over the aims of the course – notably whether the focus should be on primary or secondary care. As a result of this large number of organisations, there has been difficulty in finding a suitable host organisation for the programme and establishing funding for the pilot. We have had good support from the Ministry of Health, Birzeit University, Al-Quds Medical School in Jerusalem as well as the Palestinian Paediatric Society. As the course moves into its second phase, Juzoor (The Foundation for Health and Social Development), an independent non-governmental organisation experienced in healthcare training in the area, is taking over local organisation for the course, with funding from MAP. We continue to build links with healthcare providers in the oPt as well as encourage interest by the local medical schools to adopt some of the areas of the curriculum for their students.

Second, the occupation: there have been a number of events in the area over the last decade with the Second Intifada, the construction of the separation wall, the faltering Middle East peace process, the death of Yasser Arafat, the change of government to Hamas and subsequent withdrawal of the donor community, and the governmental split of the West Bank and Gaza. This has led to immense problems, not just for the organisations and government departments in the country, but also for locals and UK tutors as well as the participants. The safety of UK tutors visiting the region was paramount and through experience and the support of the RCPCH, tutor visits occur without mishap (though we have been unable to visit Gaza in an official capacity). The number of visits will decrease as local organisations take over the administration of the course. Continuing problems include the difficulty for participants to reach the teaching centre due to delays at roadblocks and visa restrictions from Gaza.

Ten participants were selected from those proposed by major healthcare providers in the oPt and the course was commenced. Nine successfully completed in 2007 (seven doctors and two nurses). In all, 13 UK tutors and 7 Palestinian

tutors were involved in the development process, with the same course being rolled out to 20 students in two further groups in 2008 with additional tutors.

Evaluation

An evaluation of the course is currently underway by MAP using a local researcher in the West Bank. He has met with both candidates and tutors to explore the structure and impact of the course. Preliminary feedback has shown that the course has had a positive impact on the participants' understanding of psychosocial issues leading to their feeling more effective in communicating with children and their families. Participants report 'improvements in the organisation and running of their emergency rooms', 'improved antibiotic prescribing policies' and 'dissemination of knowledge and practice to their colleagues in primary care'.

Conclusions

The enthusiasm and dedication of a number of UK and local advocates has shown that it is possible to establish a comprehensive in-country educational programme for local healthcare professionals. It has now completed a second phase with two groups working at the same time in Ramallah and Jerusalem. New tutors have undergone training, improving the educational infrastructure in the oPt, and there will be workshops for local healthcare managers to ensure that students are able to develop their practice as a result of the course. We hope that the course will extend to other centres within the occupied Palestinian territory, including Gaza where there is a great health need.

Professional relations and personal friendships have developed between UK and local tutors. This has provided UK tutors with a first-hand insight into the difficulties faced by doctors in the oPt as well as opportunities for Palestinian tutors to access further professional development overseas. Courses such as this provide not only education but also vital support to health professionals working in extremely difficult conditions.

Finally, we believe this model of course development and implementation, using both UK and local resources would be suitable in other countries around the world. Each country would have its own specific requirements, but through working closely in partnership with local doctors and organisations we see that courses could be developed to meet local needs and help to improve child health in the global arena.

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