Australia and New Zealand's support for skilled health workforce in maternal, newborn and child health in the Pacific

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Abstract

Objectives: *Australia and New Zealand (ANZ) have a long history of involvement in Pacific Island countries (PICs), which face a disproportionate burden of maternal, newborn and child health (MNCH) morbidity and mortality. We aimed to identify current training and support initiatives in PICs in MNCH, by ANZ peak bodies, explore gaps in geographical reach and highlight examples of good practice to inform planning.*

Methods: *We carried out in-depth interviews with key informants from peak professional bodies representing skilled MNCH workers across ANZ and a scoping review of the literature. Thematic analysis was carried out triangulating findings from interviews and literature.*

Results: *Training initiatives were most commonly identified as visible support for Pacific MNCH workforce. Gaps were identified in specific training needs, including in population health and planning. Major geographical inequities were identified in workforce distribution, a complex migration dynamic exacerbating workforce stresses. There is significant bilateral investment by ANZ governments in the provision of health services; but a breakdown of MNCH-specific funding is unavailable. While there was widespread good will from all peak bodies, sustained commitment was limited to initiatives supported by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Cultural ties, leadership and commitment were crucial for successful engagement with PICs.*

Conclusions and implications: *A collaborative approach to training and support of skilled MNCH workers in PICs, mapped to population needs, is urgently required. Targeted commitment by ANZ peak bodies working in partnership with global agencies can support the skilled workforce in MNCH in the region.--(PHD 2012; Vol 18(2): p146-153)*

Key Words: *Pacific Island countries, human resources for health, maternal newborn and child health*

Introduction

As we rapidly advance towards 2015, the possibility of achieving the Millennium Development Goals (MDGs), particularly goals four and five that relate to children and women remain a dream for many Pacific-Island Countries (PICs) in our region.[1] Maternal and child morbidity and mortality remain unacceptably high in many PICs particularly in Melanesia, with significant proportions of women delivering alone or with a poorly skilled attendant.[2] Particular challenges for reproductive health in the region include adolescent health, with Melanesia, alongside Sub-Saharan Africa, being the only other world region predicted to have a 'youth' population higher than 40% by 2015.[3,4] Countdown to 2015 reports suggest that much more can and should be done to address reproductive and child health; coverage of interventions related to family planning, care around childbirth, and case management of childhood illnesses which require skilled health workers is critical.[5]

It is clear that in the high mortality burden countries of the Pacific, to meet the clinical and public health gaps, there is a need for an increased focus on training needs of MNCH health workers.[6,7]

There are persistent challenges in training, retaining and providing adequate professional development opportunities for skilled MNCH workers in PICs. Many factors contribute to the health workforce constraints in PICs, including outward migration, poor retention incentives and a lack of opportunities for in-country training.[8,9] Significant levels of skilled health worker migration contributes to chronic staff shortages, often in the areas with the highest levels of need and the fewest available skilled healthcare workers,[9] effectively impeding the ability of certain countries to deliver 'affordable, accessible and acceptable' healthcare services for their populations.[10] This exacerbates existing inequities

in health and healthcare, consequently impedes the achievement of the MDGs relating to MNCH.

Australia and New Zealand (ANZ), as high-income countries in the Asia-Pacific region, have a long history of involvement in providing training, support and opportunities for collaboration for MNCH workers from PICs, mainly through supporting the Fiji School of Medicine (now Fiji National University) and the University of Papua New Guinea (UPNG).[11-13] Substantial input from committed individuals and supporting organisations have built up a sustainable surgical program in PICs,[14, 15] considerably strengthened paediatrics in PNG,[16-18] and child survival initiatives in PICs.[19,20] We know from internationally available evidence that availability of appropriately trained doctors, nurses and midwives is positively correlated with coverage of skilled birth attendance and therefore positive outcomes in MNCH.[21] There have been numerous calls to action at a global level, with the adoption of a Global Code of Practice on the International Recruitment of Health Personnel by the World Health Assembly in 2010.[22] However, there is a paucity of research concerning the initiatives underway to address these issues at a regional level, in countries such as Australia and New Zealand, which are recipients of significant numbers of skilled healthcare workers from neighbouring low and middle income countries.[23] We aimed to address this lacuna, through exploring the initiatives currently undertaken by ANZ peak bodies, in the area of training, support and collaboration for MNCH health workers in PICs.

Methods:

Using qualitative research methods emphasising "exploration, discovery and inductive logic",[24] we conducted semi-structured interviews by telephone with key informants (n=9) affiliated to the major medical and nursing educational institutions in Australia and New Zealand in MNCH and the two educational institutions in the Pacific namely Fiji National University (FNU) and UPNG that trains MNCH workers. We also undertook an augmented 'scoping review',[25] using a combination keyword search of the major regional journals, supplemented by snowballing from references identified within existing literature and document referrals from those we interviewed. Inclusion criteria were that the project, initiative or policy (1) involved the provision of institutional support, training or collaboration opportunities, on the part of a government agency, health professional training body, or community-based organisation, in the area of MNCH and (2) occurred within the past twenty years.

Data analysis

For the first phase of data analysis, employing an iterative approach, we collectively reviewed articles and strategic documents of potential relevance to the study, identified through the search results of the scoping review, which included document referral from key informants. During the second phase of analysis, the key informant interview transcripts were thematically analysed, with common themes identified during this phase of analysis. Finally, we undertook a form of 'data-source triangulation', with the findings of the document review and key-informant interviews considered in light of each other, and in relation to our overarching research questions.

Ethics approval for this project was received from the University of New South Wales Human Research Ethics Advisory Panel.

Findings

Goodwill and cultural ties

A recurring theme from all respondents from ANZ peak bodies, as well as UPNG and FNU, was the abundance of goodwill from individuals and agencies flowing towards PICs and Pacific health workers. Much of the support was informal and based on personal relationships, historic and cultural ties. Personal connections between Obstetrics and Gynaecology (O&G) specialists from ANZ and their Pacific peers were a powerful force in shaping the Royal Australian and New Zealand College of Obstetricians and Gynaecologists' (RANZCOG) commitment to the region; this has been formalised and resourced for the past 20 years. There were similar connections between ANZ paediatricians and PIC paediatricians, the Paediatric workforce in PNG and Fiji attesting to reciprocal respect and friendship. The terms of reference for the South Pacific Committee of the Royal Australasian College of Physicians has recently been drafted, and awaiting finalisation. Table 1 lists the key activities undertaken by ANZ bodies in supporting health workers in MNCH.

Training as most visible form of support

The most frequently cited form of practical and professional support provided by ANZ institutions was training. Taking the lead in this area, RANZCOG offers a number of training and support programs and initiatives, administered, monitored and evaluated by the RANZCOG Asia Pacific Committee (table 1). As the current President of RANZCOG put it "training is what we are here for, training is what we do best". Significant support for MNCH training at undergraduate level came from AusAID and New Zealand Aid through the support of the Pacific medical and nursing schools.[26,27] Respondents also suggested that many training initiatives were ad-hoc and poorly planned. As with other support initiatives personal links and cultural connections played a part in organising specific training activities. The need for a more concerted effort placed on midwifery training was seen as crucial, both the Australian and New Zealand Colleges

Table 1: Support provided by Australian and New Zealand bodies for skilled maternal, newborn and child health workforce in the Pacific region

Organisation	Pacific Committee	Key activities	Training	Budget	Innovations
RANZCOG[1]	**Asia Pacific Committee** active for over 20 years Reports to RANZCOG Board Defined terms of reference	Academic support for Pacific Medical Schools CPD Program and Associate membership for Pacific O&G Specialists Incentives/awards for achievement for Pacific O&G trainees and Fellows Fellowships/ scholarships for Pacific doctors and midwives in reproductive health	Core activity Largely clinical skills Systematised through liaison with Pacific medical schools Gaps identified	Yes	Assisted with setting up Pacific Society for Reproductive Health, financial support for the Secretariat since 2006. Pacific Midwifery Leadership program with funding from AusAID
RACP[2] (Paediatrics Child Health Division)	**South Pacific Committee** just being formed, terms of reference being finalised	Informal relationships and professional support Drivers for activity are Pacific background physicians living in New Zealand	Ad hoc Paediatric Society of NZ fund Pacific doctors to attend meetings in NZ		
RACGP[3]	No	Tailored GP training program for rural PNG doctors through National Rural Faculty over last 2 years Offer honorary overseas membership for rural registrars enrolled in PNG training program Informal links with Fiji general practitioners	National Rural Health Faculty in collaboration with UPNG developed training program		
New Zealand College of Midwives	No	Informal links with Pacific born midwives PNG project driven by an individual	PI midwives being trained in Auckland University of Technology	No	Strong links with ICM[4] pushing midwifery standards and 'twinning'
Australian College of Midwives	No	Informal relationships and professional support: focus on PNG and Fiji Scholarships for Pacific midwives to attend conferences	E-learning packages available, not targeted at international midwives	No	'Twinning' being adopted with PNG Midwifery Society, links with ICM
New Zealand College of Nurses	No	Focus on Maori/Pacific nurses working in New Zealand Informal support to Pacific born nurses Strong focus on primary health care	Not targeted	No	Promote 'Cultural safety' as form of working.

[1]RANZCOG: The Royal Australian and New Zealand College of Obstetricians and Gynaecologists
[2]RACP: The Royal Australasian College of Physicians
[3]RACGP: The Royal Australian College of General Practitioners
[4]ICM: International Confederation of Midwives

of Midwifery acknowledging their potential roles in leadership in this regard.

Limited human resources base

There is a small pool of people who have the requisite qualifications to enter the healthcare workforce in PICs, attributed to the shortage of training facilities at country level. A recent World Health Organisation (WHO) country report on Papua New Guinea (PNG), noted that despite significant bilateral aid from Australia, New Zealand, Japan and the European Union (EU), there remain enduring gaps in healthcare resourcing, characterised by an "inappropriate distribution of healthcare staff" and compounded by "education and training which do not always meet the healthcare system needs".[28] Smaller Island states, such as the Solomon Islands, have greater struggles in training and retaining skilled healthcare professionals such as paediatricians, which poses long-term challenges to the viability of child-specific services in these countries. PNG lost most nursing schools in the 1990s, when all nursing schools were obliged to have university affiliation, the already critically endangered workforce in PNG had a real-time loss of nurses and community health workers between 2004-9.[29] Potentially exacerbating this problem is the provision of ANZ aid scholarships to highly trained and skilled PIC professionals, which results in not only a temporary loss of skills, but contributes to brain drain.

A complex migration dynamic

Respondents generally agreed as has been shown in the literature, that migration from PICs of skilled health workers benefitted Australia and New Zealand.[30] One informant commented that, in the New Zealand context at least, many of these supposed gains were offset by losses of domestic nursing and medicine graduates to the overseas 'market', including Australia, rendering the human resource dynamic in the region much more complex to both gauge and address. There were also concerns about active 'poaching' of health professionals from PICs. There were some caveats, however, with another informant noting that due to the NZ system of registration for medical practice only offering a two-year window for registration and practice (during the course of study), unless these individuals become fellows, they have to return to their respective countries in the allocated time. Finau advocated for a deliberate policy of encouraging mobility of PIC healthworkers between Pacific countries to reduce isolation, enhance sharing and appropriate skills transfer.[31] While this is happening to some extent, it is largely unplanned and reactive, rather than planned and coordinated.

Specific skills shortage

Specific clinical skills shortages were acknowledged such as in ultrasonography, laparoscopic surgery, vacuum and forceps aided delivery. Training and professional support for specific skills was more likely to be provided by training institutions such as RANZCOG. Primary healthcare, paediatric nursing, mental health support were all felt to be lacking in PICs. There was an acknowledgement generally of poor support for midwives, although the current AusAID initiative in PNG around midwifery support was acknowledged.[32] An overwhelming need for adequate resourcing and planning MNCH interventions in PICs was appropriate public health expertise, which was significantly lacking, particularly in PNG. In the mid 1990s, Finau advocated for a reorientation of the health workforce in PICs with improved skills in public health in order to respond to modern health problems.[31] Interestingly, the best funded research institute and one producing the most reproductive health research in PICs, is the PNG Institute of Medical Research which receives dedicated funding from AusAID.[33] Research skills in reproductive health were likewise a major lacuna, in spite of suggestions from regional WHO that ANZ research councils should provide support for research training opportunities in the Pacific.[34] Clinically relevant research skills, including in quality improvement initiatives have been the focus of the last

Lack of engagement with Pacific health needs

The issue of geographical inequity in relation to MNCH service delivery in PICs was raised by many participants, this inequity is most pronounced in PNG.[29] The use of uniform physician/patient ratios in small Island-nations such as Tonga, with clustering of health professionals in capital cities could pose particular problems for populations on other islands. On the flip side, due to the very small populations in many islands it is not feasible to staff them each with a full complement of doctors. The generally weak health infrastructure and support systems in the PICs were often not factored in while planning or delivering health and support initiatives, such that some were doomed to fail from the start. Similarly, not understanding the 'Pacific way', respecting cultural values and social strengths of PIC communities can lead to mismatches between ANZ support offered and the needs on the ground.[35]

Funding for MNCH initiatives

Both Australia and New Zealand, through their respective Aid agencies, have made significant financial contributions to the delivery of healthcare services, and the construction of healthcare facilities, in PNG and Fiji through the Health Sector Improvement Programmes.[36,37] A breakdown of MNCH specific funding is difficult to derive however, in spite of both aid

programs listing MNCH as priority, either by focusing on the MDGs or sexual and reproductive health.[27,36,37] One MNCH-specific contribution from NZAid targeted at midwifery curriculum development and mentoring for local graduates alone totalled $670,000. However, a recent independent report on the MNCH work-program raised concerns, noting that "although 60% of project funds have been expended, the lack of documentation of actual expenditures makes it difficult to determine effectiveness, efficiency, impact or sustainability".[38]

What is working well?

Case study

The Pacific Society for Reproductive Health (PSRH) is an example of an enduring and successful partnership between the reproductive health workforce of Pacific Island Countries and colleagues and institutional bodies in both Australia and New Zealand. Founded in 1993, with funding from AusAID and the Fiji School of Medicine, the PSRH held its inaugural meeting in 1995 in Vanuatu.[39] Membership of the PSRH is currently "open to all those involved in reproductive or neonatal health care in the Pacific" and the activities of the organisation are supported by an active Secretariat. The formal programs initiated by the PSRH, beyond active efforts to build a cadre of engaged members and maintain communication with stakeholders through regular newsletters, include country-specific action plans adopted at PSRH conferences, which aim to address local MNCH needs. However, there is variable implementation of these action plans, primarily due to the lack of professional and financial support available to those tasked with carrying them out at country level. The last two scientific meetings have focussed sharply on building clinical research and audit capacities of PIC health workers.[40]

Discussion

The WHO estimates that 4.3 million more health workers are required to meet the health MDGs by 2015.[41] This alarming figure significantly underestimates the global need for human resources because the WHO only accounts for shortages in 57 countries,[42] omitting consideration of critical shortages faced by small and medium sized PICs. Indeed, all PICs have a shortage of health workers, some more severe than others. We found that whilst a rhetorical commitment to providing support and training opportunities to PICs exists within ANZ peak bodies, material plans and resourcing to advance these stated objectives are largely lacking, on the part of major institutional training bodies and government agencies in ANZ.

Evidence-based packages of integrated healthcare targeting the perinatal continuum including acute clinical care (reproductive health, obstetric care, and care of sick newborn babies and children) and outpatient care (reproductive health, antenatal care, postnatal care and child health services) can significantly improve MNCH outcomes in low/middle income countries.[43] Ideally these evidence-based healthcare interventions are best supported by targeted training and mentorship. Although training initiatives loomed large in the scope of what ANZ bodies deliver, and training has been seen as an important need for MNCH workers in PICs,[19] we found that training is not always delivered in a planned, coordinated fashion. RANZCOG as the regional training institute for obstetrics and gynaecology does take its role in the Pacific seriously. Indeed RANZCOG's sustained commitment not just to training, but also collegial support to MNCH healthworker and initiatives in PICs, provides leadership and a way forward for other academic and professional organisations.

Australia and New Zealand as two of the most significant 'receiving' countries of regional healthworker migration,[30] have an ethical responsibility to respond to the challenges of delivering equitable and quality MNCH services in the region. With continued pressure likely to be placed on MNCH services, sustainably managing the migration of skilled healthcare workers, and improving levels of retention, through support and collaboration initiatives across the region, will play a strong role in the ability to resource domestic healthcare services in PICs. Respectful and meaningful partnerships on an equal footing with Pacific health workers and regional organisations are one way of achieving this. The PSRH as a regional organisation with a big mandate can be more effective if appropriately supported by ANZ governments, by tackling training and research needs in MNCH for the whole region. Recent literature has highlighted that reciprocal training opportunities in low resource settings may provide substantial benefit to junior doctors and trainees in MNCH.[44-46] Goenka et al go as far as suggesting that in future, paediatric training in the United Kingdom may include core elements of global child health, as well as designated 'tracks' for those wishing to develop their career in global health further.[45] Political will has been identified as a major factor, in either enabling or impeding the achievement of both the MDGs and reducing inequities in health and wellbeing.[47] Building a broad, community-based coalition of support across PICs, can only be possible if we engage with regional and in-country organisations. This must not add to already overloaded health workers' and managers' workloads, as many PIC health meetings have tended to be; with unhelpfully mixed mandates, and duplicate areas of focus with other governance mechanisms.[48] There is already concern from Pacific health researchers, about the dominance of expatriates or non-PIC researchers leading publications in health

research in Fiji.[49] True partnership and engagement with PICs' women and children, must be culturally responsive to their understanding of health,[50] health worker motivations,51 and Pacific health systems.[35] We need to harness the abundant good will effectively and build on the pioneering leadership of individuals who have contributed to MNCH in the past decades. The challenge is to optimally align the workforce needs of PICs and the political willingness that leaders in the public health field espouse, with available resources, to engage in capacity building initiatives that are mutually beneficial. Finau called for strong regional action that would support "Pacifically appropriate" training to produce credible health workers who could think globally, act locally and be recognised internationally.[31] Mitchell et al have also strongly advocated for formalising training of global health in Australia with the potential to produce fellows with the skills and knowledge necessary to engage appropriately in regional health challenges.[46]

Conclusions: A call to action

Taking these ideas forward, we propose the following recommendations to address MNCH specifically; a call to action for ANZ peak bodies working respectfully and in collaboration with PICs. These recommendations were endorsed by the recently concluded PSRH conference in Samoa.[40]

We call for a closer alignment between the activities of regional professional training Colleges involved in reproductive and child health and NZ Aid/AusAID bi-lateral programs. We strongly support ANZ national governments prioritising training within their own countries when domestic shortages of health professionals become intractable issues. We recognise that a regional body well supported by ANZ governments and peak bodies would be well placed to take on the role of training in clinical skills and public health research in MNCH. However such a regional body needs to be adequately resourced and have clear lines of accountability and governance.

Specific strategies to improve MNCH training and support in the Pacific include more PIC-based training opportunities for identified skills deficits, an increase in undergraduate training in medicine, nursing and allied health, supported by regional planning. Peak ANZ bodies need to scale up efforts to respond in an evidence-informed manner to identified professional needs in PICs; this requires regional planning and coordination. Increased professional recognition and opportunities for collegial engagement modelled on the RANZCOG Associate Membership category can easily be transferred to other professional bodies. There is a clear need for an increase in reciprocal training arrangements; there are well recognised benefits to the ANZ workforce from engaging meaningfully in global health initiatives, and such training is already well established overseas.[46] We call for more direct investment in midwifery and training for midwives, and a multi-disciplinary team approach to maternity care. Strengthening of public health and research capacity for MNCH clinicians and administrators is also a priority training need. Finally and perhaps most importantly we call for targeted and fully transparent resourcing of MNCH specific initiatives in PICs responding to population health needs, again regionally planned and coordinated.

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