## Medical students, medical schools and international health

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ustralian doctors have a long tradition of serving the poor. Many individuals have made considerable contributions to the needs of underprivileged communities both here and abroad. Indeed, health is increasingly recognised as essential to the growth and sustainability of all nations. In recent years, medical students across Australia have begun to engage with the challenges of international health in new and innovative ways. Student international health organisations (SIHOs) have formed at most medical schools in response to a renewed interest in serving the needy. These groups demonstrate how an emphasis on global health may both enrich Australian medical schools and equip the next generation of doctors to be leaders in international health.

### The rise of student international health organisations

International health has featured in Australian medical schools for many years, primarily in the form of "elective terms" in developing countries. Students typically spend 6–8 weeks in supervised health care settings of their choice. The benefits of these elective terms have been well described.<sup>2-4</sup>

Until recently, however, most students lacked a practical way of responding to the global health inequalities that they encountered.

The Medical Students' Aid Project (MSAP) formed in 2001 in response to the elective term experiences of students at the University of New South Wales. These students believed that their experiences in underprivileged nations demanded a collective response. They framed their approach as a "partnership", recognising the benefits of the overseas experiences for students, and identifying a need for medical supplies at partner hospitals. MSAP quickly garnered support from the student body, university administration and private donors. Its initial success stemmed from the enthusiasm of its student leaders, the support of senior faculty members, regular meetings, and its focus on meeting specific, achievable needs. Now in its seventh year, MSAP continues as a forum for promoting international health and providing basic medical aid. In 2006, MSAP donated to hospitals in 14 countries, including Vanuatu, Ghana and Bolivia (Box 1).

Driven by similar interest, more than 10 not-for-profit student groups have formed in medical schools across Australia since 2001. We wrote to each SIHO chair in May this year,

asking about their formation and function. A summary of responses is given in Box 2.

The SIHOs formed a national collaboration in 2005, with the creation of the International Health Network (IHN; http://ihealthnet.net/). Supported by the Australian Medical Students' Association, the IHN provides a forum for sharing enthusiasm and ideas. It publishes a regular newsletter, hosts a website, and facilitates the Developing World Conference, which brings together more than 500 Australian medical students each year.

The Australian experience mirrors that of student networks throughout Europe and North America, including the International

ABSTRACT

- Over the past decade, student participation in international health has moved beyond individual elective terms in developing countries to collective responses led by student international health organisations.
- There are now at least 10 such organisations, with more than 500 medical students participating at a local or national level each year.
- Student international health organisations can deliver short- and long-term benefits to developing countries, while equipping students with skills such as leadership, teamwork and cultural sensitivity.
- Activities include delivery of medical equipment, fundraising, educating university communities, and acting as advocates for social justice.
- We believe Australian medical schools must formally incorporate international health into their curricula, drawing upon the experiences of schools in Europe and North America.

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Federation of Medical Students' Associations, the United Kingdom group Medsin, and the American Medical Students' Association.

#### The achievements of SIHOs

SIHOs seek to contribute to the needs of the developing world at a stage when many students feel disempowered by their place in the medical hierarchy. Each group achieves a slightly different balance between education, advocacy, aid provision, infrastructure development, promoting careers in international health, and collaborating with other aid organisations. We believe that these organisations have the potential to achieve considerable short- and long-term benefits in the developing world, while delivering immense personal and professional rewards for students and the medical community.

1 Packing medical supplies to send overseas



#### Activities in developing countries

Many groups aim to deliver targeted contributions to foreign clinics and hospitals, often in the form of basic medical supplies and infrastructure. If hospitals or clinics identify items in short supply, students can deliver these personally during their elective terms. Recent contributions include birthing kits for women in Vietnam and Madagascar (Wake Up!, University of Newcastle), medical equipment for Lady Willington Hospital in northern India (TIME, University of Queensland), and efforts to equip a health care centre for orphans in Chiboba, Zambia (Victorian Students Aid project, University of Melbourne).

#### 2 Australian student international health organisations

				EnSIGN				
	MSAP (UNSW)	lgnite (Monash University)	HOPE (Griffith University)	TIME (University of Queensland)	Wake Up! (University of Newcastle)	(Australian National University)	SANTE (James Cook University)	MAD (Bond University)
Year formed	2001	2004	2005	2005	2005	2006	2006	2007
Main funding source	95% fundraising	55% fundraising 25% corporate	40% corporate 30% faculty	70% fundraising 20% corporate	60% corporate 30% fundraising	na	100% fundraising	na
Student numbers (approximate)	45	30	20	30	30	35	20	30
Major activities	Medical aid Advocacy	Advocacy Aid other NGOs	Medical aid Advocacy	Medical aid Advocacy	Medical aid Advocacy	Advocacy Non-medical aid Aid other NGOs	Non-medical aid	Advocacy Medical aid
Main long-term partnerships	Thailand Malawi Vanuatu Cambodia	India Uganda Belize	Ghana	India Solomon Islands	Vietnam Madagascar	None yet established	Papua New Guinea	Solomon Islands

Groups not included in this table did not respond to survey questionnaire. EnSIGN = Engaging Students In Global health Network. HOPE = Health Opportunities for People Everywhere. MAD = Making A Difference. MSAP = Medical Students' Aid Project. NGO = non-governmental organisation. SANTE = Supporting All Nations Towards Equality. TIME = Towards International Medical Equality. UNSW = University of New South Wales. All these groups were initiated and are run by the students. na = not answered.

Other groups raise funds to support existing health care systems. HOPE (Griffith University) has supported the construction of a medical centre in Ghana (Box 3). Other organisations address determinants of poverty; for example, SANTE (James Cook University) has delivered pens, pencils and books to schools in Papua New Guinea.

Although student groups are aware of their limited capacity to transform the root causes of poor health and the negative effects of globalisation, they believe their efforts can make a meaningful contribution.

Clearly, student organisations must remain mindful of any potential negative effects of their activities, and develop processes to ensure that donations are appropriate and delivered effectively. We believe it is vital to work in partnership with existing health care

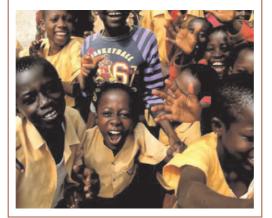
structures, to avoid creating parallel health systems and to respect local autonomy.

Student organisations can also have particular difficulty sustaining long-term relationships. For example, MSAP has provided medical equipment to the Queen Elizabeth Hospital in Malawi for only 4 of the past 6 years, owing to year-to-year variation in the availability of elective students. This experience underpins the importance of SIHOs' committing to a small and achievable number of partner hospitals.

## Achievements at Australian medical schools

Student organisations have achieved great success in the university and broader community. SIHOs enhance community awareness by helping stu-

3 Primary school children in Dabaa, Ghana, where HOPE (Griffith University) is supporting a new medical centre



dents, other health care workers, and the general public to engage with global health inequality. They also focus students' attention upon the broader social, political and economic contexts of disease. In the past year, Ignite (Monash University) held a photo exhibition promoting international health awareness, and Insight (University of Adelaide) has held forums on HIV/AIDS and Women's Health in the Middle East. MSAP holds an annual project launch, with invited keynote speakers (Box 4).

Medical students develop personal and professional skills as they lead their organisations. Fundraising projects develop skills in advocacy and persuasion. Students learn to chair meetings, work as a team and manage finances. Others use creative skills through marketing and publicity. We believe that skills learned by students

> will equip them to serve the poor throughout their careers, whether overseas or locally. Already, alumni of MSAP have worked as medical volunteers in Papua New Guinea, Burma, Malawi and Fast Timor

### Where can SIHOs go from here?

Australian SIHOs are coming of age; however, challenges remain (Box 5). Long-term sustainability is a key issue. SIHOs must develop structures to ensure continuity between successive student cohorts. Problems may arise if the organisation becomes too dependent on an individual or single year group, as corporate memory can be quickly lost. Established groups are facing the challenge of deciding how large they can become yet retain full-time stu-

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dent ownership. We believe that SIHOs must retain student ownership as a central value to retain the energy and dynamism that student autonomy brings.

The IHN can look to the experiences of student networks in the UK, Europe and North America to strengthen its own approach. Similarly, the IHN and the more established student groups can share their experiences with newer groups as they mature. In future, the IHN may develop national standards to help all groups deliver aid ethically, raise funds transparently, and interact with other non-governmental organisations appropriately.

### 4 Neurosurgeon Dr Charles Teo speaking at an MSAP project launch



that can be taught to all students. 13 These include knowledge of the global burden of disease, travel medicine and immigrant health. Cross-cultural health and refugee health are highly relevant to caring for Australia's immigrant community. International health also provides an excellent vehicle for promoting general principles of social justice. Schools may also develop additional elective subjects for students with a particular interest in global health. Teaching on public health, tropical medicine, anthropology, and human rights could also be expanded. 14 Some important diseases, such as avian influenza and multidrug-resistant tuberculosis, require an understanding of public health principles at a global level. For these reasons, a former

WHO Director-General has argued that "the separation between domestic and international health problems is no longer useful". 15

# New directions in international health education

It is important that faculties not only encourage their SIHOs, but also review how international health is taught. There are several compelling reasons for change.

#### Promoting social justice in medical schools

The three most prominent functions of medical schools are teaching, research and clinical service. A fourth concern — social justice — often receives less attention. In 1995, the World Health Organization emphasised the importance of "social accountability" in medical schools, citing an "obligation to direct . . . education, research and service activities towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve". Some authors argue that, when a society confers resources and privileges on medical schools, they must in turn serve the greater social good. 9,10

Medical schools have a moral duty to prepare doctors who can care for Australia's disadvantaged populations. As the world becomes more interdependent and aware of global health inequalities, <sup>11</sup> wealthy nations such as Australia arguably also have a moral duty to consider the interests of their poorer regional neighbours. <sup>12</sup>

#### Educational benefits for all medical graduates

A curriculum that emphasises international health will facilitate teaching on many issues that are relevant to Australian medical practice. Houpt and colleagues have argued that medical schools must identify certain domains of international health competency

#### 5 Long-term challenges facing SIHOs

- Transition of experience between each cohort of students.
- Stability and long-term sustainability of funding.
- Tension between desire for expansion and accepting the limitations of scale for a student organisation.
- Outsourcing of fundraising (eg, to schools).
- Managing corporate sponsorship ethically.
- Acquiring tax-deductability status for donations.
- Negotiating the interface with university and other charities.
- Building an alumni network to ensure future support from doctors.
- Strengthening the International Health Network.
- Improving accountability for donated money.

#### Responsiveness to student interest

Students are increasingly seeking input into the design of curricula. Some authors have argued that medical schools "must listen to [medical students'] views as the consumers and purchasers of medical education". <sup>13</sup> A number of medical students training in Australia will return to low- and middle-income countries, and need to understand the diversity of health care settings. Further, many Australian students are keen to work in international settings during their early careers. Consequently, there is an increased demand for teaching of international health. Where medical schools endorse these approaches, they help students learn cross-cultural medicine, encourage idealism<sup>3</sup> and inform students' future careers. <sup>4</sup>

#### How universities can respond to this call

The educational needs of the general medical student body are distinct from those of students with a particular passion for

## 6 How medical schools can promote international health<sup>14</sup>

- Endorse, promote and mentor student international health organisations while supporting their autonomy.
- Integrate global health topics into core medical curricula.
- Offer courses on global public health and tropical medicine.
- Offer various elective courses, such as medical anthropology, international development and health, or health and human rights.
- Offer combined degree programs (eg, MD/PhD, MD/MPH) in global health.
- Provide academic, logistic, and financial support for international rotations
- Establish a global health administrator or office within the medical school.
- Form international partnerships with institutions in developing countries.
- Create more scholarships and financial support for international exchanges.
- Make an international clinical rotation a routine part of medical education.

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international health. Australian medical schools can do much to help both groups (Box 6).

#### Progressive international health curricula

Medical schools in Sweden, the UK and the Netherlands have built international health into their curricula. <sup>12</sup> In the United States, a consortium of 70 medical schools <sup>16</sup> has appraised teaching of international health nationwide, and developed teaching modules to better promote a global health agenda. Medact, a UK group, has also developed communal curricular resources for global health teaching. <sup>12</sup>

In 2003, the Medical Deans of Australia and New Zealand identified a need to collaborate in regards to standards for electives in developing countries. <sup>17</sup> However, the task remains incomplete. There is a great potential for this body to oversee guidelines that support Australia's medical schools in providing integrated international health curricula. James Cook University illustrates how this might be done. Its offers a subject entirely devoted to international public health (Professor Craig Veitch, Professor of Rural Health, James Cook University, personal communication). James Cook University also maintains links with hospitals in East Timor, Papua New Guinea and Fiji, and provides scholarships for students on overseas electives.

#### Supporting elective programs

There are many practical ways in which universities can support existing elective programs. Firstly, universities must ensure that they adequately prepare students before they leave and provide appropriate debriefing on return. Many universities provide administrative staff to support elective terms. Other valuable approaches by faculties across Australia include funding scholarships, subsidising vaccines or HIV starter packs, cataloguing previous students' experiences, and recommending worthwhile destinations. Sydney University's Hoc Māi initiative with Vietnam exemplifies a sustainable program operated by a medical faculty to support students during their medical electives and build international cooperation. <sup>18</sup>

#### Supporting SIHOs

Autonomy and diversity are the great strengths of student groups, yet SIHOs can also learn a great deal from faculty staff with experience in international health. Academics can act as mentors for student leaders, and provide valuable advice about how to run the organisations well. Many student groups invite faculty members to speak at events, and draw on the university community for advice and financial support. It is important, however, that student organisations are not subsumed by faculty programs.

There is considerable scope for medical schools and postgraduate training programs to work together to stream students into careers in international health. With expanding graduate numbers in coming years, there is opportunity to develop innovative training pathways. Further research is also required to evaluate student interest and identify what particular skills are required for students and junior doctors to serve overseas long term.

#### **Conclusion**

We believe that international health is a high priority for medical students. Leadership by medical students, through SIHOs, has reinvigorated an interest in social justice. SIHOs provide a highly effective model for learning through experience and can complement a well rounded medical education. It is time for medical schools to review their curricula and renew their international health teaching. By exposing all students to some global health, and creating opportunities for those with a particular interest, medical schools will help equip our future doctors to be leaders of an increasingly global medical profession.

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#### **Competing interests**

None identified.

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