A decade of improvement in pain education and clinical practice in developing countries: IASP initiatives

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Summary points:

1. Epidemiological studies, in the late 1990s and early 2000s, on the extent of pain in the community of western countries revealed a prevalence of around 18%, with significant effects on work and social activities despite 30 years of pain education programmes.
2. A survey by the International Association for the Study of Pain (IASP) Developing Countries on the extent of pain education and clinical training, and the barriers to them, was published as report in 2007 and confirmed significant deficiencies and problems in all areas.
3. An IASP Developing Countries Taskforce was established in 2002 to facilitate improvements in pain education and management in developing countries through a grants support programme for bottom-up projects from developing country members.
4. Clinical training posts in centres in Thailand, South America and South Africa have been established to improve the clinical training of pain clinicians and, through them, to develop pain services in their countries of origin in which services are poorly developed or absent.
5. There has been a major surge in the demand for and development of programmes and clinical training in developing countries since 2002, reflected in greatly increased local activity in various regions of the world.
6. Based on the ethical/moral belief that pain treatment is a human right, the IASP has recently increased its levels of advocacy to support this belief.

Keywords

Educational models, pain management, developing countries

Ten years ago it was clear that pain education and management in developing countries was lagging behind that of more affluent areas of the world. For example, in 1998 a World Health Organization (WHO) collaborative study on primary care in developing countries revealed that chronic pain was present in up to 35% of those questioned.¹ Pressure from several International Association for the Study of Pain (IASP) chapters led to a review of the extent of IASP support for pain education in developing countries, which at that time consisted chiefly of funding for visiting lecturers, the provision of IASP books for main libraries and travel aid for those wishing to attend

congresses. A decision was taken to expand the aid given, and in 2002 a Developing Countries Taskforce – later a Working Group (DCWG) – was formed. In 2005, a survey of education and training in developing countries was carried out to establish a baseline for

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Figure 1. Developing countries with IASP chapters.
Source: IASP DCWG report 2007.

Figure 2. Ranked frequency of pain types treated.
Source: IASP DCWG report 2007.

further action.² The regions involved are shown in Figure 1.

Between 1998 and 2006, three significant papers on the extent of unrelieved pain in the community were reported. A study by Breivik and others³ of European countries, a second by Blyth⁴ in Australia and a third by Eriksen and others⁵ in Denmark all revealed that chronic pain was present in around 18% of their respective populations. The study by Breivik and others in Europe involved just over 30,000 respondents revealing that 18% had moderate to severe pain with a mean duration of 7 years. More than half were less able or unable to work and almost a quarter suffered from depression. Twenty per cent said their doctor did not regard their pain as a problem and only 22% saw a pain specialist. Clearly, even in advanced western countries, relief from pain remains a significant problem. Over 90% of respondents to the IASP survey said that pain was a significant issue in their populations.² The range of pain disorders treated by pain specialists is shown in Figure 2.

Two questions arise: what are the barriers to the better management of pain and how might they be overcome?

IASP survey of pain education and pain management in developing countries

The IASP survey of chapter members in developing countries covered undergraduate and postgraduate education, facilities available for the management of acute, chronic and cancer pain. It also included a survey of barriers to pain education and management.

Results from the survey revealed that although up to 50% of respondents had, as undergraduates, attended formal courses relating to pain, over 90% stated that the level of education was not sufficient to cover their needs at the time they graduated and entered practice. Recently, a similar study, conducted by Briggs and others from the British Pain Society,⁶ revealed that 'the amount of pain education in the curricula of healthcare professionals is woefully inadequate'. In fact, undergraduate health professionals received an average of only 12 hours of pain education; strikingly, veterinary students received twice as much time in their curricula and physiotherapists three times as much as medical and dental school students. The fact that undergraduates who will encounter pain and suffering in their professional practice are so poorly educated is depressing, and leaves practitioners well short of the main objective of all those involved in the care of people in pain; namely, that pain treatment is a human right.

The IASP was aware of the problem of poor pain education from its foundation in 1974. To combat the deficiency it produced specific curricula for undergraduates (for medical students in 1988, pharmacy in 1992, dentistry in 1993, occupational therapy in 1994, and for nursing, the second edition of which was in 2006) and a core curriculum for all professions, which entered its third edition in 2005.⁷

IASP education and clinical training initiatives

Education

In 2005, anticipating the main results from the survey, the DCWG established a programme of grants of up to \$1000 for bottom-up educational projects. Strict criteria were, and continue to be, applied to the applications (Table 1) and, to date, 74 grants have been made and distributed to 34 countries (Table 2).

Projects fall into several categories, the main ones being basic pain education, distance learning packages

Table 1. IASP education programme: application assessment criteria.

1. Evidence of good organisation, educational expertise, basic knowledge of pain mechanisms and clinical management
2. Local needs clearly identified as basis for application
3. Curriculum must match students' needs and be based on written materials or a distance learning course
4. Clear plan for pre- and post-course written, oral or practical assessments as appropriate
5. Detailed and realistic budget with minimum social costs

Source: IASP DCWG report 2007.

Table 2. Developing countries educational projects: grants distributed by region, 2005–2011.

Africa	14
Asia	18
Eastern Europe	16
India	6
Latin America	17
Middle East	3

Source: IASP DCWG report 2007.

and education in specific forms of pain management, for example the control of pain in cancer patients and during childbirth. Two grants were provided for educating those involved in the storage and use of opioids in Egypt and Nigeria after their introduction to clinical practice. A small number of applications were made for pain management in childhood, which perhaps reflects the relatively few practitioners amongst the respondents involved in dealing with children in pain; pain management in older people and for programmes focused on psychological aspects of pain management. The last point reflects the emphasis in many pain clinics in developing countries on physical methods of treatment combined with a lack of training in psycho-behavioural technique and/or time to practise them.

Recently, reports from completed projects have been subjected to systematic analysis by a small group of DCWG members using Kirkpatrick's Four Level Learning and Training Evaluation Method; a model widely used in industry. The results from a pilot study of the method support the facilitation by IASP grants of the educational processes. In very broad terms, upon completion of the courses, participants showed improved levels of both knowledge and the transfer of new knowledge to daily practice. Further work is planned to refine the assessments and to increase the range of information that can be gained from the model.

Clinical training

In 2008/9 the DCWG increased its support for pain management in developing countries by providing resources for the pain centre, a multidisciplinary clinic in Bangkok, directed by an anaesthetist, Professor Pongparadee Chaudakshetrin. Since then, support has been given for both short-term traineeships of 3 months and fellowships of 1 year. The latter have been funded in collaboration with the World Federation of Societies of Anaesthesiologists (WFSA). The purpose of the training programmes is not just to improve the knowledge and clinical skills of the trainees, but also to prepare them for their return to their home countries, which may have limited or no facilities for pain management services and where they are expected to improve or develop those services. Mentoring from Bangkok is available after their period of training. To date, all the trainees have been anaesthetists and they have come from Cambodia, Laos, Vietnam, Mongolia, Sri Lanka, Bhutan and Indonesia. The success of the Bangkok centre has led to the establishment of a second centre in Bogota, Colombia, where a second 1-year fellow is currently undergoing training. A third pilot centre is being established in Cape Town, where it is hoped that two trainees at a time will receive 3 months' training. In this case, the cost will be shared with the WFSA.

In addition to support for programmes linked to IASP chapters, the DCWG provides grants for organisations with different care programmes for developing countries, but particularly those that contain substantial elements of pain management. Three organisations have been supported. The WHO has received support for a programme directed at the problems of acquired immune deficiency syndrome and cancer care in East Africa. Also, in Africa, several years' worth of grants have been provided to students training at the Hospice Africa Uganda Institute of Palliative Medicine, which is active in several countries in sub-Saharan Africa, except Uganda. Kybele is an organisation that has programmes designed to reduce maternal and infant mortality in developing countries. Currently, the IASP supports the work of Kybele in Ghana, Georgia and Armenia with specific reference to pain relief. Finally, recognition by the government of Mongolia of the need for pain management centres has resulted in IASP support for this initiative following a successful 1-year programme grant to an IASP member and a period of training for another in Bangkok.

Further developments

The original aims of the DCWG were to improve pain education, but recognition that clinical training should

Table 3. IASP Global Year Against Pain initiatives since 2004.

2004–2005	Right to pain relief
2005–2006	Pain in children
2006–2007	Pain in older persons
2007–2008	Pain in women
2008–2009	Pain in cancer
2009–2010	Musculoskeletal pain
2010–2011	Acute pain
2011–2012	Headache

Source: IASP DCWG report 2007.

also be supported led to the development of the IASP training centres described above. The influence of those centres on other countries in their regions is growing, but another development is also taking place, reflecting a marked interest overall in pain education and management in developing countries since the IASP programmes began: the establishment of regional groups and meetings, which have arisen spontaneously. The first regional group to develop was the European Federation of IASP Chapters (EFIC) in the mid-1990s. Federación Latinoamericana de Asociaciones para el Estudio del Dolor (FEDELAT) followed in South America in the early 2000s, and in 2009 the South-East Asian countries founded the Association of South-East Asian Pain Societies (ASEAPS). The EFIC was responsible for a European Week Against Pain in 2001, and that idea was later taken up by the IASP in 2004 with its 1-year 'Global Year Against Pain'. Since then, the Global Year Against Pain has continued (Table 3), and the publications associated with it are widely appreciated in developing countries.

Besides structural regional groups of countries, another aspect of the efforts made by the IASP to stimulate educational and clinical training is evident in India, where two groups have been very active. The Indian chapter of IASP (ISSP) recently launched a country-wide series of educational and clinical programmes and has established a Pain Academy. The second organisation, Pallium India, which is headed by Professor M R Rajagopal, is dedicated to all aspects of palliative care. It promotes education in palliative medicine through courses and an influential newsletter. Importantly, both groups have done much to improve the availability of opioids in India, where the government, as recently as 2007, produced less than 10% of the amount of morphine needed in that country for cancer patients.⁸

Advocacy is a process of influencing public opinion at all levels from the general public to government

ministers with a view to improving knowledge about pain, its effects, its treatment and, importantly, the provision of facilities for its management. The process began in 2004 with a joint meeting of the WHO, EFIC and IASP, at which the ethical slogan 'Pain treatment is a human right' was the focus, and which then became the basis of the first IASP Global Year Against Pain. A further step in advocacy was taken in Montreal at the 2010 World Congress of IASP, when a pain summit involving clinicians, politicians, health providers and pain sufferers was held with the aim of stimulating similar networking events worldwide. It gave rise to the 'Declaration of Montreal', a call for pain relief to be regarded as a basic human right.

Conclusions

The stimulus of the IASP schemes, justified by information gained from its survey in 2006 of developing countries, has produced a palpable rise in the level of interest, knowledge and clinical skills in pain management in developing countries. It has also encouraged health providers and governments to give greater emphasis to pain control and, to some extent, relax the severe restrictions on the use of opioids in particular, but also other drugs. In other words, the barriers to good pain management are being broken down greatly to the benefit of pain sufferers worldwide, though much work remains to be done.

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