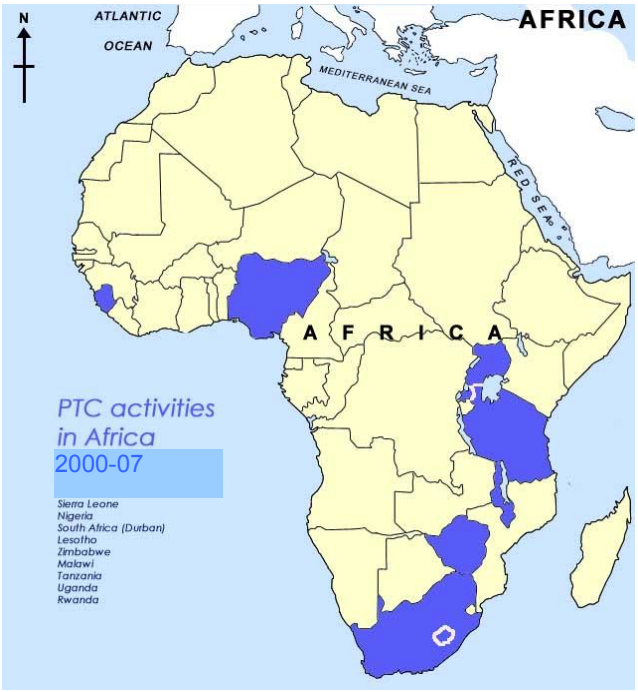
1. Introduction



1.1 Over the last eleven years PTC has been introduced in a total of more than 30 countries throughout the developing world. In many countries we have seen widespread and enthusiastic adoption and promulgation of PTC principles and courses. It is noteworthy however that although the initial introduction of PTC was into Africa, and it was mainly of Africa that we were thinking when PTC was created, the needs and strategies required for Africa differ from those in many other parts of the world.

The purpose of this review is to look back and see what things have worked, what things have not and how we should go forward over the next 5 years.

1.2 It is widely recognised that all sorts of aid projects are more difficult to run in Africa because of the general lack of infrastructure and the overwhelming needs of huge sectors of the population. New leaders are not being trained in adequate numbers, many of the most able national leaders have emigrated, and in the realms of information and resources Africa is probably the most difficult area of the world in which to work. We should not therefore be surprised that it is there that we have come across our greatest difficulties in establishing and sustaining PTC.

1.3 The first documented use of what became PTC materials was on the 1996 WFSA refresher course in Nairobi. In subsequent years PTC materials were taught elsewhere in Africa, some in workshops that did not constitute full PTC courses. However during this time much of the focus for PTC development was elsewhere, particularly in the Pacific region, in association with our Australian colleagues. The information about courses, which follows, has been taken from the PTC 2000-2004 review.

- In 2001 we raised our profile by holding 2 half-day PTC workshops in association with the all Africa Anaesthesia Congress, which was held in Durban. 60 people attended each of the sessions in which we outlined the content of PTC and gave those attending a taste of the way that we teach it. Bill Casey also introduced PTC at the Nigerian society of anaesthetists.

- The first large PTC course in Africa was held at KCMC in Tanzania in 2001 in association with the anaesthesia refresher course. There were 79 trainees, a mixture of doctors and clinical officers mostly, from anaesthesia; Dr Henry Bukwirwa led the course.
- Also in 2001 a PTC course took place in Bulawayo after the Durban meeting. There were 25 trainees but they were all very junior and no potential instructors were identified. Consequently it was not possible to set up a national committee, or to take PTC forward in Zimbabwe at that time.
- A course in Lagos took place in 2002 with instructors mostly travelling from East Africa; for the first time a significant number of surgeons (30%) were present.
- A course in 2001 was held in Blantyre, Malawi attended by 14 people and at the conclusion of this a PTC committee was formed, however no more has been heard from it.
- In 2003 a team of instructors went to Sierra Leone where 10 trainees, (anaesthetists and surgeons), underwent a PTC course.
- In 2003 Malawi was the focus of a concentrated effort. A regional 2 day instructor course was organised by Dr. Henk Heisma for potential instructors from both Malawi and Zimbabwe. Following a 1.5 day instructor course all trained instructors immediately participated in running further courses in the same location. Courses for Medical students were again run in 2004 & 2005.
- Later the same year the recently trained instructors in Malawi ran a course for trainee anaesthetic clinical officers in Lilongwe, while the Zimbabwean instructors ran two further courses in southern Zimbabwe.
- In 2004 there were no PTC course in Africa, however in 2005 a foundation package was given in Lesotho which 20 trainees attended and in Rwanda 40 trainees underwent a similar 2 :1 :2 foundation package at the end of which a PTC National Committee was formed.
- In 2005 we ran a PTC foundation package in Rwanda, training 40 trainees and 10 instructors.
- In 2007 we ran the first PTC foundation package in South Africa (Umtata, Eastern Cape).

Year	Location	Trainees	Remarks
2001	Durban	120	Half day PTC workshops
2001	KCMC Tanzania	79	Part of refresher course – anaesthetic clin officers
2001	Bulawayo	25	No potential instructors
2002	Lagos	25	30% surgeons
2003	Blantyre	40	Instr course (Malawi+Zim) followed by 2 PTC then

			3 more Zim & 2 Malawi + med students in 04 & 05
2001	Blantyre	14	Committee formed but sank!
2003	Sierra Leone	?10	Anaes & surgeons
2003	KCMC Tanzania	79	need for ppre/post test & impact study
2003	Lilongwe	15	TACO's
2003	Binga (Zim)	11	Instructors from Blantyre course
2003	Bulawayo (Zim)	36	Instructors from Blantyre course
2003	Lagos	20	14 Anaes, 6 Surg. PTC+ instructor course
2005	Lesotho	20	Mostly surgeons. 2:1:2 foundation package
2005	Rwanda	40	Surgeons & anaes. 2:1:2, PTC committee formed
2007	Eastern Cape, SA	30	Surgeons & anaes 2:1:2 PTC committee formed

1.4

Funding for our Africa courses has come mostly from Anaesthetic sources: The Association of Anaesthetists of Great Britain and Ireland, the Dutch Society of Anaesthetists and the World Federation of Societies of Anaesthesiologists. Normally this support has taken the form of payment of lecturers and sometimes course expenses.

2. What have we learned in Africa so far?

2.1 Africa is a very needy place. In every place we have visited trauma has been a major public health problem and one of the commonest presenting clinical emergencies that our colleagues working in hospitals have to deal with.

2.2 Although Africa is a huge continent with tremendous variety of culture the problems our colleagues face are very similar to one another and the uniform approach of the PTC course has proved effective wherever it has been used.

2.3 Our clinical colleagues are doing a tremendous job but with very poor resources and the PTC materials have been welcomed everywhere and put into use.

2.4 African courses have, in general, required more financial support because with lower wages and salaries, and often long distances to travel it has been necessary to give support in kind (bus travel, accommodation & food) to those attending. Sending instructors between African countries is often no cheaper (although preferable) to sending instructors from Europe. The same problems have made it much more difficult for most countries in Africa to be financially self-sustaining in relation to follow-up courses and outreach. This is in marked contrast to our experience in Asia (e.g. Indonesia, Pakistan, Iran) where often only a single foundation package is needed to generate a spreading national network of courses. See for example the Pakistan PTC network at http://health.groups.yahoo.com/group/ptc_sind/

2.5 We have made it a principle that PTC does not pay per diems to course participants for the reason that this would simply attract those people that we least want to attend the courses.

2.6 PTC has not become well-established in any country until the equivalent of the "Foundation Package" (containing a PTC course, instructor course, and formation of a national PTC committee), has been supplied. In future we should not provide "one-off"courses as they are simply not effective in achieving our aims to make PTC both widely available and self-sufficient.

3. Problems

3.1 Geography

We have not established a base in West Africa, nor have we had a significant impact in non-English-speaking countries. Most significantly, until 2007 we have not had an impact on South Africa. In large modern cities SA already operates a sophisticated trauma system including high-tech tertiary referral centres, helicopter retrieval etc – yet in many areas, rural and urban, a good standard of trauma care is not available. This year's foundation course in Umtata (former "Transkei homeland") is a significant step, which we intend to make our regional base in Africa, aiming to drive the generation of PTC courses both in Eastern Cape and in adjacent countries.

In the first few years our African enterprise has had a number of false starts and much of what we have done has remained dependent on foreign lecturers. This needs to change, and we have now appointed Dr David Oloruntoba, a Nigerian surgeon working in South Africa, as our regional co-ordinator.

3.2 Training strategy

In the early years in Africa we directed our efforts almost entirely towards anaesthetists; this was not effective since anaesthetists in Africa are very often clinical officers, who work only in the operating theatre and do not get involved in treating trauma as it comes into the hospital. Increasingly our strategy has changed and surgeons have become more involved in PTC courses and in teaching on them. It is also striking that so far in Africa we have made little impact with Ministries of Health or with WHO representatives, although there have been some exceptions to this.

3.3 PTC Representatives in Africa

The latest edition of the PTC instructors' manual lists 8 country representatives for PTC in Africa. It is vital for us to have good contacts in those countries where we work but we have been rather vague about what the job of being a PTC representative entails.

So far as I am aware we have never given our representatives a formal job description or requested them to undertake a standard programme of activities to promote PTC and as a result some of them are more active than others. Some may not even be aware that they have this role.

The relatively high turnover of our country representatives, whether they are of African or non -African origin has been a regular problem and has made it difficult to maintain continuity in many countries. We should produce a clear statement of what the responsibilities of country reps are. I think we should also be looking for an African to head up PTC in Africa in line with the way things have gone in Asia and South America.

Current list of country representatives:

Country	Representative	Active in last year?
Malawi	Rose Chimoyo/Henk Haisma	yes
Zimbabwe	Mike Cotton	yes
Zambia	Dixon Tembo	?
Tanzania	Victor Mwafongo	?
Kenya	Charles Kabeto	?
Uganda	Joe Tindimwebwa /David Nekyon	no
Nigeria	Wemi Soyannwo	?
Sierra Leone	(Eric Vreede – now in E. Timor)	no
Lesotho	David Olonturoba	yes (but now in S.A)
Rwanda	Paul Kayabinda, Etienne Nsereko	yes

4. Lessons learned elsewhere that we could apply in Africa

4.1 Looking at those countries where PTC has grown rapidly and sustainably, a number of things are apparent. There is usually a strong local organiser with good professional contacts, often involving University, Ministry of Health and WHO. This allows PTC to develop a strong national identity and not to been seen as a foreign import.

4.2 Very often the strongest medical figures are surgeons rather than anaesthetists and surgical involvement has been very helpful. In Africa we must in future seek to build PTC into national systems of health and education, and wherever possible enlist WHO support. PTC national committees must include surgeons as well as anaesthetists.

4.3 In those countries where incomes are moderate course organisers have in some cases charged a small fee to cover the expense of running courses thus making them essentially self sufficient in these respects, and reinforcing their feelings of independence, and of responsibility for their own "patch".

5. Possible strategies

5.1 ***It has always been PTC's strategy to do as much as possible for as many people as possible. This has allowed us to reach more people in more countries than any of the comparable trauma training systems and this is a sound principle to which we should adhere.***

5.2 Our training materials and the 2 day PTC course format are very effective and other than minor updating and correcting, do not require any major changes.

5.3 We should give high priority to establishing a strong regional base with academic and professional support.

5.4 If external funding becomes available we could consider setting up a regional training centre to which people from other African countries could come, particularly for training on instructor courses. This would allow us to build a network of people less dependent on foreign visitors than the one we currently have.

5.5 It has recently come to our notice that an instructor we have previously trained has set up PTC courses independently in Botswana, a country where we have not been active. This is a positive development, but we need to look carefully at what is being done there and decide whether we can support this initiative and turn it into something we can further support.

6. Strategic Choices

As ever, choosing what to do also means choosing what not to do. There are a number of possibilities, some of which I have listed below.

Africa is very large and we are unlikely to reach even a majority of countries with an in depth programme in the next five years. Strategies to be considered include:

6.1 *Consolidate and do not expand into new countries.* Focussing on a small number of countries where PTC has already been established in order to build a strong programme there so that these countries will become centres of excellence. The weakness of this is that we are simply reinforcing our current patchy distribution, with no discernible regional plan.

6.2 *Broaden our strategy as much as possible* to use our materials to reach as many people as possible. We could even if this we do this without formal PTC courses. We could develop teaching materials based on the trauma manual and slides and send these out widely via the internet, CD and paper publications etc to any groups wishing to have them. The obvious disadvantage of this is that we would simply not know what was happening to these materials since there would rarely be any feedback. We also know that well-organised courses are much more effective than just sending materials, but it would perhaps be worth producing some "educational posters" which could remind people of the basics while also promoting PTC.

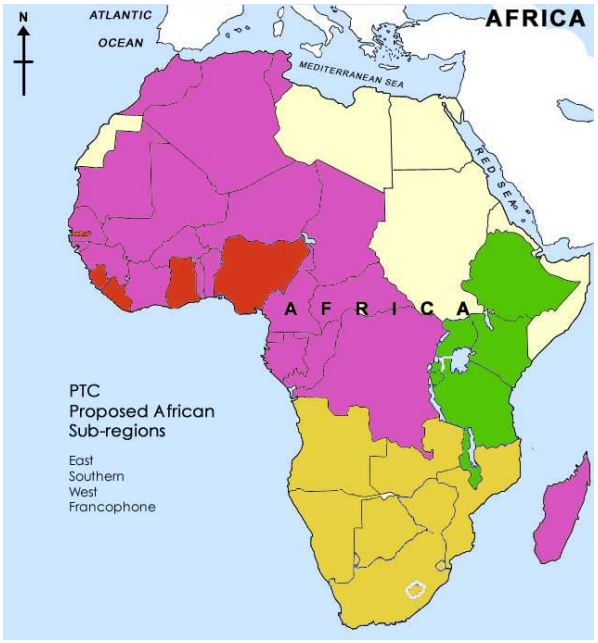
6.3 *Develop stronger regional leadership.* Although we can continue externally (predominantly European) supported PTC activities, we are unlikely to make significant progress unless there are regional drivers – both people and countries (as in Indonesia, Pakistan & Paraguay), who will take PTC forward without the need for external pressure – albeit with whatever support they want from PTCF, quite probably including significant levels of funding. We need strong leadership which is recognisably African – including making sure our African leaders are resident in Africa. Because of the special circumstances in Africa, we may need to consider part-time employment for such leader(s).

6.4 *Requests pending.* We must also consider what to do about those countries in which there have already been requests or plans to extend PTC for the first time.

6.5 *We have an under-used resource* in the numbers of (chiefly western) trained instructors, and those who have requested instructor training. They do not fit into our "Foundation package + rapid local devolution" model. At the same time we get some requests (and could generate more) for "one-off" PTC courses. Using some westerners in this way would enable us to do more, and would raise our profile in those countries where we need to generate income for the charity.

6.6 It is possible to increase our activities both in breadth and depth and to do it effectively provided we do it in a planned and considered way. I think in the present context this means that we should only go to new countries if they are part of a recognised regional strategy.

6.7 Regions: We should think of Africa in terms of 4 regions; East Africa; Southern Africa; West Africa and Francophone Africa. New PTC initiatives should be linked in to those countries in the region that already have a PTC programme and the leadership would be made part of a local network.



6.8 Linking up with surgical organisations should have a high priority and this includes surgical organisations based in Africa rather than simply Royal Colleges and Associations in Europe.

6.9 We have had contact with a WHO employee in Brazzaville in the Violence and Injury Prevention Department of the Africa Region. This should be pursued because WHO support in each country could be extremely helpful, not only because of the prestige that WHO has, but because with WHO support we should find it easier to deal with Ministries of Health. It seems unlikely that WHO will provide new funding.

6.10 It is essential for us to work this way and build PTC into the Health and Education system of as many countries as possible. This will help it to escape from being a foreign aid project dependent always on outside forces and funds to drive it.

7. Conclusions

7.1 Africa is and will continue to be a difficult place to work – if it wasn't we wouldn't be there!

7.2 Having reviewed all the courses that I have been able to find out about, it is good to report that in the last few years we have provided a very cost-effective training for upwards of 400 African professionals in the techniques of Primary Trauma Care. It costs less than £100 to train each person!

7.3 All through this time PTC has been evolving and we have been learning lessons here and elsewhere in the world which we should now apply so that we can work more effectively in the future.

7.4 We need to consider also the place of Africa in global PTC strategy. The potentially explosive growth of PTC in China will have the effect of moving our centre of gravity (as well as our centre of finance); it must not cause us to lose sight of the needs of Africa.

7.5 Africa should be prominent in our charitable fund raising. It is unrealistic to expect it to move to financial self-sufficiency in the next 5 years. We should allow £5000 for each new "start-up" package plus £2000 for continuing support in each country where we are already established.

7.6 Build stronger links to support "country representatives" and give them some aims and model projects, e.g.

a. building links with other specialties, Health Ministry, WHO rep, medical schools & training institutes.
b. At least one PTC course per year
c. Help set up a PTC committee

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