



Massive Open Online Course on

# Lower Limb Amputee Rehabilitation

# Final Report

June – August 2015

Run in collaboration with and funded by the  
International Committee of the Red Cross

Course co-ordinators: Rachael Lowe (Physiopedia) and Barbara Rau (ICRC)

Course facilitators: Leslie Muller, Aicha Benyaich, Francois Friedel

Course sponsor: CR Equipements

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## Overview

**Course Type** - Open, Online

**Course Co-ordinators** - Barbara Rau, Rachael Lowe

**Collaborating Partners** - International Committee of the Red Cross (ICRC) and Physiopedia

**About this course** - This online course covers basic theoretical knowledge of lower limb amputee rehabilitation

**Who was invited to take part** - Physiotherapy and Physical Therapy clinicians, students and assistants; other interested professionals such as prosthetists/orthotists, occupational therapists, nurses or medical doctors interested in this subject are more than welcome to participate.

**Date that it ran** – 1 June to 26 July 2015

**Time commitment** - 24 hours over 8 weeks

**Requirements** – Participants were required to complete online learning activities, engage with additional resources, take part in the conversation online and complete the course evaluation.

**Assessment** - There was a final quiz and participants were asked to write a case study on an individual with amputation.

**Awards** - Completion certificate plus 24 International Physical Therapy Continuing Education Units from the World Confederation of Physical Therapy (WCPT)

## Cost to participants

The course was free to all participants

## Characteristics of the participants

Ultimately, 7639 participants formally registered for the course. They were from 150 countries (see Appendix 1), were mainly working physiotherapists (see Appendix 2 and 3) and had a mix of experience (see Appendix 4). The most represented countries were:

United Kingdom	918
USA	820
Canada	583
Australia	537
India	441
Nigeria	252
Malaysia	235
South Africa	202
Philippines	185
Pakistan	166

## Aim of the course

This course was aimed to provide workforce training for the International Committee of the Red Cross (ICRC).

The aims of this course were to:

1. provide participants with general knowledge about lower limb amputation,
2. present aspects of prosthetics and prosthetic fitting,
3. highlight the importance of a comprehensive approach of rehabilitation (from pre surgical activities to discharge and follow up),
4. present the overall rehabilitation process specificities, and
5. offer a worldwide discussion platform on lower limb amputee rehabilitation.

## Platform

The course was run through the Physiopedia website where all course pages were (and remain) openly available. These course pages were visited a total of 125,487 times through the duration of the course (1 June – 26 July 2015). The breakdown is shown below:

Page in Physiopedia	Link	Number of times visited
Week one	<a href="http://www.physio-pedia.com/PP06 - Week One">http://www.physio-pedia.com/PP06 - Week One</a>	22,311
Week two	<a href="http://www.physio-pedia.com/PP06 - Week Two">http://www.physio-pedia.com/PP06 - Week Two</a>	16,603
Week three	<a href="http://www.physio-pedia.com/PP06 - Week Three">http://www.physio-pedia.com/PP06 - Week Three</a>	14,743
Course activities	<a href="http://www.physio-pedia.com/PP06 - Course Activities">http://www.physio-pedia.com/PP06 - Course Activities</a>	14,383
Week six	<a href="http://www.physio-pedia.com/PP06 - Week Six">http://www.physio-pedia.com/PP06 - Week Six</a>	11,691
Week four	<a href="http://www.physio-pedia.com/PP06 - Week Four">http://www.physio-pedia.com/PP06 - Week Four</a>	11,098
Week five	<a href="http://www.physio-pedia.com/PP06 - Week Five">http://www.physio-pedia.com/PP06 - Week Five</a>	8,606
Main course page	<a href="http://www.physio-pedia.com/Lower_Limb_Amputee_Rehabilitation_Course">http://www.physio-pedia.com/Lower_Limb_Amputee_Rehabilitation_Course</a>	7,979
Pre course activities	<a href="http://www.physio-pedia.com/PP06 - Pre-Course Activities">http://www.physio-pedia.com/PP06 - Pre-Course Activities</a>	7,326
FAQs	<a href="http://www.physio-pedia.com/PP06 - FAQ%27s">http://www.physio-pedia.com/PP06 - FAQ%27s</a>	275

## Communication with participants

Participants were sent an email at the beginning of each week. This outlined what they were expected to do that week and directed them to an appropriate URL to find the details. It also provided an opportunity to communicate about any issues that had arisen in the previous week. The email was also posted online and linked to in the course pages and the discussion forum.

There were 6045 subscribers to the email list. Some of those who registered failed to provide a working email address so could not be added to list.

The course started with a 70% open rate and equivalent engagement of over 4000 people. By the end of the course engagement had dropped to around 40%, the equivalent engagement of around 2500 people. The drop is due to natural drop out rates and also due to the fact that people could also access the email online.

Open rates and number of people that opened each email throughout the course are shown below:

	Open rate	Opened by
Joining instructions	70.7%	4274
Week One	71.0%	4292
Week Two	53.8%	3252
Week Three	45.1%	2726
Week Four	43.5%	2630
Week Five	39.6%	2394
Week Six	41.1%	2484
Week Seven	37.8%	2285
Final Email	43.6%	2636

## Course textbooks

There were three course textbooks:

1. Engstrom, B., and Van de Ven, C. *Therapy for Amputees*. Edinburgh: Churchill Livingstone, 1999.
2. Morvan, C., Packirisamy, V., Rechsteiner, M., and Friedel, F. *Prosthetic Gait Analysis for Physiotherapists*. ICRC. 2014.
3. Gailey, R., and Gailey, A. *The Rehabilitation Series for Lower Extremity Amputees*. Advanced Rehabilitation Therapy Incorporated (ARTI). 1994.

The copyright owner made online access to these books free for the duration of the course. In addition to this ICRC permitted a free PDF download of their book and Elsevier and ARTI made the exclusive offer to participants to purchase a PDF download of their books at a significantly discounted price. All proceeds from book sales were given to the copyright owner.

Participants were particularly grateful for this aspect of the course. It is evident that making books available online in this way during an online course has a significant impact on sales of the hard copy of the book.

## Discussion Forum

Participants were required to participate in the discussion forum on a weekly basis. This was made a requirement as it provided a rich learning experience through self-reflection on learning and exposure to global discussions about amputee rehabilitation. This was the task that participants found most difficult to complete.

The discussion forum was hosted on Facebook as a private group where the weekly discussions were guided by 3 questions that participants were asked to comment on. Only course participants were invited to join and post comments in the group. It was clear that not all people engaging with the course joined the group and participated in the discussions.

Number of people who joined the Facebook group .....	3,525
Number of people that contributed on a weekly basis .....	969 (approx.)
Number of posts (estimation only) .....	around 18,000

## Quizzes

Each week participants were given the opportunity to assess their knowledge and understanding of the topic through multiple-choice quizzes. Participants received immediate feedback on right and wrong responses making this a rich learning experience.

In the final week participants were invited to attempt the final multiple-choice quiz. This quiz was designed to assess knowledge and no feedback was given. The pass mark was 80% and they could attempt the quiz as many times as they liked.

Number of individuals that attempted the quiz .....	1,431
Number of quiz attempts .....	3,491
Number of individual passes .....	1,303

## Final Assignment

Reflecting on their learning and using the knowledge gained throughout the course participants were asked to prepare a simple case presentation of one of their own amputee patients OR if they weren't currently working with amputee patients they were to complete a case assignment based on one of the cases provided (see Appendix 4).

Completed case assignment with own patient ..... 524  
 Completed case presentation with case study provided ..... 615  
 Total final assignments submitted ..... 1,139

## Assessment

In week 6 participants were directed to complete 2 final tasks that were assessed:

	Completed	Passed
Final quiz	1431	1303
Case study assignment	1139	1133

## Certificates

Participants were provided with a certificate of completion provided they had completed the 5 required tasks that were clearly outlined from the outset of the course:

1. Passed the final quiz at 80% ..... 1303
2. Passed the final assignment ..... 1133
3. Completed the post course competency tool ..... 1229
4. Completed the evaluation form ..... 1196
5. Contributed to the discussion forum each week .....969 (approx.)

Participants were invited to apply for their certificate of completion after the final deadline for completion of all required tasks. Some people failed to contribute adequately to the discussion forum; these participants were issued with an alternative certificate.

- Full certificates - 799
- Alternative certificates - 274
- Total certificates issued – 1073

## Course Accreditation

The course was accredited by WCPT for 24 International Physical Therapy Continuing Education Units (IPT-CEUs). These credits were given to the participants that received full certificates.

The South African Physiotherapy Society (SASP) who awarded CEU points for the course to South African residents also accredited the course.

## Course Evaluation

Participants were asked to complete an online course evaluation at the end of the course (see specific responses in Appendix 5).

The number of participants who completed the evaluation ..... 1,196

Participants were overwhelmingly positive about the course (see Appendix 6 and 9) for details). They particularly liked:

- That it was free
- The opportunity for global conversation
- Quizzes to test knowledge and learning
- Videos: case studies and interviews with experts
- Course specific readings on Physiopedia
- Access to text books
- Variety of resources and learning methods

Aspects that some participants did not enjoy included (see Appendix 7):

- That Facebook was used for the discussion forum
- The requirement to post to the discussion forums
- The discussion posts were repetitive and not meaningful
- Discussions were hard to negotiate due to the number of course participants
- Slow internet limiting access to course materials
- The way the books were presented made them hard to navigate
- Took longer than stated time each week

## Impact of group work

We asked people to let us know of any group work that took place in parallel to the course. We were pleased to see several dedicated groups that used group work for peer support and practical skills (see Appendix 8).



## **Impact on clinical practice**

We have heard of several particular instances where clinical practice has been directly impacted by the course. These instances relate to re-evaluation of service delivery in clinical departments and/or individuals who have been motivated to try to make changes in their departmental service delivery (see Appendix 10 for details).

## **Future**

The plan is for this course to be run on a biannual basis as part of the Global Health Certification that Physiopedia is developing. We are currently seeking funding to support this plan.

## **Contact details**

For further information, please contact:

Rachael Lowe  
Physiopedia  
rachael@physio-pedia.com

## Appendix 1 – Course participants: countries

United Kingdom	918	Thailand	21	Cayman Islands	4
USA	820	United Arab Emirates	21	Bahrain	4
Canada	583	Dominican Republic	20	Mali	4
Australia	537	Hungary	20	Senegal	4
India	443	Uganda	19	Venezuela	4
Nigeria	252	Nepal	19	Togo	4
Malaysia	235	Norway	19	Botswana	4
South Africa	202	Zimbabwe	17	Syria	4
Philippines	185	Lebanon	16	Morocco	4
Pakistan	166	Germany	15	Niger	3
Jamaica	161	Japan	15	Algeria	3
Sudan	132	Democratic Republic of Congo	15	Grenada	3
Singapore	132	Croatia	14	Fiji	3
Jordan	121	Switzerland	14	Seychelles	3
Saudi Arabia	120	Estonia	13	Brunei	3
Mexico	111	Chile	13	Iran	3
Egypt	109	Romania	13	Swaziland	3
Israel	104	Haiti	12	Benin	3
Afghanistan	102	Guyana	12	Antigua	3
Palestine	99	Sweden	11	New Caledonia	2
Ethiopia	94	Oman	11	Bosnia and Herzegovina	2
Greece	86	Lithuania	11	Iceland	2
Malta	85	Mauritius	10	Libya	2
Iraq	78	Bulgaria	10	South Sudan	2
New Zealand	76	Cambodia	10	Uruguay	2
Colombia	67	Peru	10	Cyprus	2
Italy	65	Barbados	9	Kosovo	2
Costa Rica	63	Kuwait	9	Papua New Guinea	2
France	54	Iraq	9	North Korea	2
Bangladesh	53	Denmark	9	Ivory Coast	2
Ghana	52	Madagascar	9	Burkina Faso	2
Spain	51	Slovakia	8	Bermuda	2
Ireland	50	Somalia	8	Tajistan	2
Netherlands	50	Reunion	8	Guatemala	1
Sri Lanka	47	Qatar	7	Laos	1
Portugal	44	Belgium	7	Cayman Islands	1
Kenya	38	Bhutan	7	Macedonia	1
Rwanda	37	Bahamas	7	Martinique	1
Poland	35	Albania	7	Luxembourg	1
Vietnam	35	Bolivia	7	Slovenia	1

Puerto Rico	31	Zambia	7	Aruba	1
Turkey	31	Malawi	7	Gabon	1
Hong Kong	29	Czech Republic	6	St. Lucia	1
Brazil	26	Cameroon	6	Chad	1
Indonesia	25	Mongolia	5	Curacao	1
Finland	25	Tunisia	5	Paraguay	1
Yemen	25	Serbia	5	Taiwan	1
Trinidad and Tobago	24	Panama	5	Central African Republic	1
Myanmar	23	China	5		
Tanzania	23	Burundi	5		
Namibia	22	Argentina	4		

## Appendix 2 – Course participants: profession

Physiotherapist	6506	85.17%
Prosthetist/Orthotist	382	5.00%
Occupational Therapist	281	3.68%
Therapy Assistant	127	1.66%
Doctor	103	1.35%
Other	74	0.97%
Sports Therapist	52	0.68%
Student	47	0.62%
Nurse	18	0.24%
Orthopaedic Technologist	15	0.20%
Osteopath	8	0.10%
Athletic Trainer	7	0.09%
Kinesiologist	6	0.08%
Physiotherapy Educator	5	0.07%
Podiatrist	5	0.07%
Technical Instructor	2	0.03%

### Appendix 3 – Course participants: experience

< 1 year	3012	39.43%
no experience	1553	20.33%
> 5 years	1067	13.97%
1 to 5 years	2010	26.31%

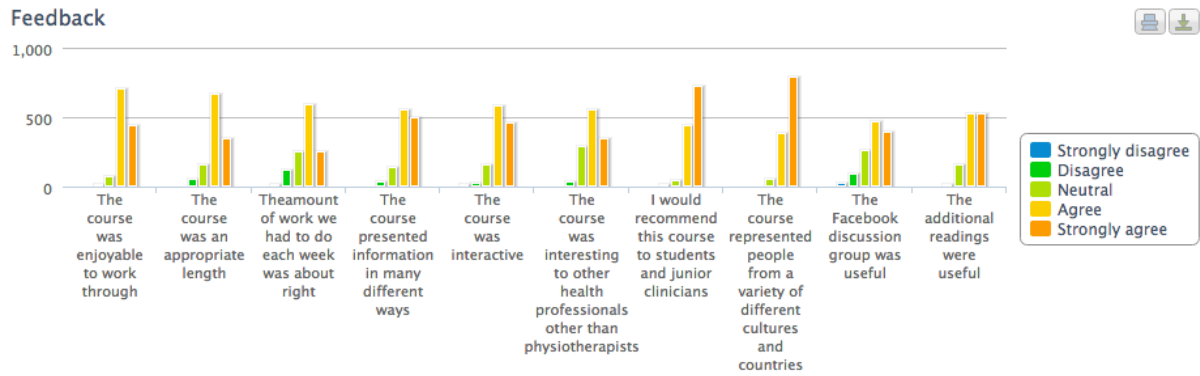
### Appendix 3 – Course participants: professional role

Clinician	5154	67.47%
Student	1976	25.87%
Educator	410	5.37%
Other	76	0.99%
Manager	18	0.24%

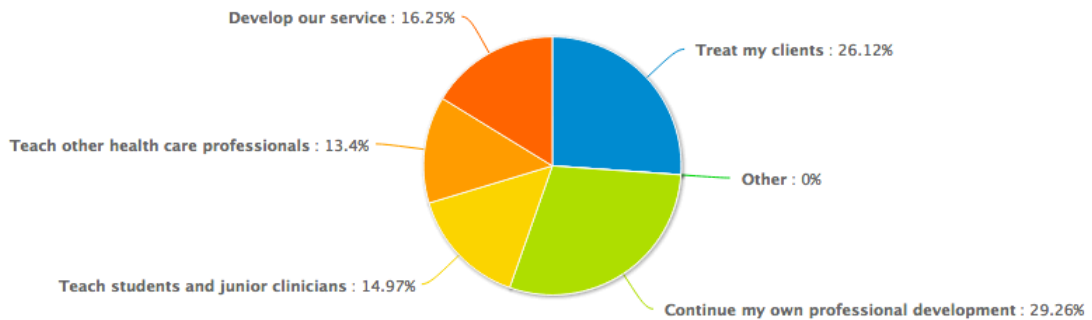
## Appendix 4 – Case presentations provided for final assignment

	Link	Number of times accessed
Diabetic	<a href="http://www.physio-pedia.com/PP06-Diabetic_Case_Presentation">http://www.physio-pedia.com/PP06-Diabetic_Case_Presentation</a>	1,602
Older Person	<a href="http://www.physio-pedia.com/PP06-Older_Person_Case_Presentation">http://www.physio-pedia.com/PP06-Older_Person_Case_Presentation</a>	902
High Level Rehabilitation	<a href="http://www.physio-pedia.com/PP06-High_Level_Case_Presentation">http://www.physio-pedia.com/PP06-High_Level_Case_Presentation</a>	586
Low Resourced Setting	<a href="http://www.physio-pedia.com/PP06-Low_Resourced_Case_Presentation">http://www.physio-pedia.com/PP06-Low_Resourced_Case_Presentation</a>	463
Paediatric Case	<a href="http://www.physio-pedia.com/PP06-Paediatric_Case_Presentation">http://www.physio-pedia.com/PP06-Paediatric_Case_Presentation</a>	435
Upper Limb Considerations	<a href="http://www.physio-pedia.com/PP06-Upper_Limb_Case_Presentation">http://www.physio-pedia.com/PP06-Upper_Limb_Case_Presentation</a>	271

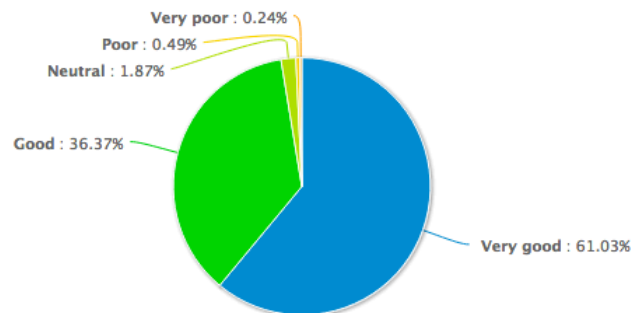
## Appendix 5 – Course evaluation: specific responses



I have used or intend to use the knowledge I have gained from the course to:



Overall rating of the course





## Appendix 6 – Course evaluation: what worked well (selected responses)

The way weeks were presented, discussion groups, videos and resource materials, course organization.

I really enjoyed the discussion board on Facebook. It was great to hear what others were thinking and to provide my perspective. It was a great experience.

Excellent structured, clear instructions each week. Physiopedia website very easy to navigate through.

The provision of course materials and related information was well organised. The duration of the course is well suited. Evaluation methods were really good.

The course was very interactive, interesting and informative. The videos of the amputee cases provided lot of first hand information. The Facebook discussions with physiotherapists from different countries provided awesome experience. Overall it was just an amazing learning experience.

Being a therapist who does not have much exposure to amputee rehabilitation this course provided in a easy to understand, comprehensive way, interactive method including both reading and viewing material to actively learn and explore the subject.

The flexibility to work in my own time during the duration of the week. Different areas of accessibility, and learning styles (reading, visual, auditory).

Enjoyed learning from different cultures and countries who had different resources but still reached the same goal at the end of the day. Learnt techniques I had never come across on textbook but from other people's experiences that made it very interesting.

Being able to see what other countries are doing from amputee management was particularly interesting. Loved the discussion forum generally.

Providing us with the resources and instructions for the week and allowing us to complete as we had time. Giving us the opportunity to use the course to benefit each of us the most, whether we wanted to look at all the supplemental readings or just focus on particular areas.

I did enjoy the discussion forum very much, since it gave me the advantage to explore other people's comments. The alternative text documents provided for the case study was also very useful.

I enjoyed the layout of the course, the course readings, use of videos and textbooks. I enjoyed being able to work at my own pace.

Friendly, open discussions. Good course structure with organised objectives each week. Course duration was good. Own time learning meant it was flexible.

I enjoyed the easy accessibility of the online format and that I was able to progress through the course at my own pace.

Many different avenues to learn information from, discussion between peers from different countries and environments which raised awareness and brought great discussion, a quiz to apply our knowledge and see what we've learned.

I really enjoyed the Facebook group because I was able to read a lot of interesting ideas from people all over the world. It's awesome to see other perspectives about rehabilitation from other therapists in different countries and compare what you learned and researched. I thought the pace of the class was well thought out too. 24 hours worth of studying over 6 weeks is perfect.

The free and easy access to resources was great. While I had my doubts about using a forum like Facebook, it actually worked really well. I enjoy the video interviews with experts.

I really liked the Physiopedia pages - they contained concise, relevant information on each topic. The videos and pictures were also great.

Access to the valuable books.

The variety of high quality resources available and the quiz at the end of each week to check knowledge gained.

I have absolutely loved every minute of this course! In university we have so much to cover we never really get to go into a subject in detail. This course has been amazing and has inspired me to apply to amputee rehab for my next placement. The Facebook discussions have been excellent and it's been very valuable and informative reading other peoples' comments and hearing about amputation and rehabilitation in other areas of the world.

Weekly instalments; variety of methods information was presented via; clear learning objectives; involvement of a non-for-profit organization.

I really enjoyed the video presentations with case studies with additional reading. The access to information was amazing and the discussion forums were well done. Overall, this was an amazing experience and I would recommend it to anyone working with amputees (or those wanting to improve their knowledge base).

I liked that I could work through the activities at my own pass and liked the quiz at the end of each week to test my knowledge.

I enjoyed the course very much. A great amount of knowledge was presented. I like watching the videos as it gives more perception into the subject and you could apply the reading material to the practice. The discussions with specialists each week were also very interesting, especially the one with Dr Gailey in Week 5 as that particular discussion provided great insight.

Loved the quizzes.

I enjoyed the concise Physiopedia resource. There was detailed description on every aspect of amputation. Easy to read and had detailed information so when referring to other readings it was like an overview of what I had already learnt on Physiopedia. A wonderful resource I hope to use in the future.

I liked the discussions and the involvement of professionals from other countries.

The course was well structured with a variety of learning methods to keep the interest and reinforce each aspect. The information presented was very comprehensive and supplemented with discussion giving insight into varying aspects of amputee rehabilitation in different settings.

Outstanding quality of comprehensive material. Very easy to complete and enjoyable.

The up to date information with all of the references was excellent. I really enjoyed the practical balance of evidence based practice with realistic service provision depending on resources available. The weekly quiz was a real help in evaluating learning as we went along and I enjoyed participating in the Facebook discussions.

Ability to discuss the topic with professionals all over the world.

The online references, the online books, well written Physiopedia pages. It was an excellent and comprehensive overview of the subject.

## **Appendix 7 – Course evaluation: what didn't work well (selected responses)**

Some of the videos were hard to understand - language barriers/accents.

I found the Facebook discussions quite overwhelming and difficult to follow.

There were some weeks in the initial part of the course where I had a hard time getting access to the Internet and believe it or not I am in the USA!

There was no practical component.

The overall amount of reading to be completed each week was difficult to cover it all.

Because the Facebook forum had so many people it was difficult to follow, so I found myself not reading much and just adding my input

I think more information should come to us as full document.

The discussion forum was too big to be useful.

I didn't get much from the discussions, only because I found it to be a bit overwhelming trying to search through posts that applied to my setting.

A lot of content to cover each week, often the readings overlapped significantly.

I couldn't manage to download videos.

Some weeks contained too much reading and/or information. The course should of been longer - too much material for such a short amount of time, especially when you're working full time. I felt as if more than the amount of hours that were suggested was needed and all the extra resources were a bit overwhelming.

Facebook discussions clogged up email.

The final assignment was not easy when one does not work in the field.

I couldn't watch the videos because it used too much data.

The amount of reading exceeded the 4 hours on most weeks. Whilst the information is valuable, it may be better to report the course expectations as being greater than the 4 hours in the initial Introduction.

I struggled with the vast amount of reading especially when trying to fit it around a full time job.

Some of the e-books were hard to use because the font was small and zooming in made it hard to navigate the page.

Too much of reading.

Assignment was very long and time consuming after doing all the course work and readings each week. The word requirements were lengthy. I think the quiz would have been enough.

Need for Facebook use.

The Facebook discussions were to lengthy to follow at times and sometime lacked any direction in terms of 'a discussion'.

Having to open so many different kinds of sources from the Physiopedia page was a little bit annoying. It was also hard to load so many different pages at once so it slowed down the course. Having the discussion on Facebook is hard because there were so many comments and it was hard to trace the discussion from the beginning.

Too much information to take in.

The way that books open to read them was difficult to follow and not comfortable.

Final assessment pieces rely heavily on previous experience working in this setting.

I did not enjoy the Facebook posting. It was too overwhelming and I feel it did not accomplish the goal it was intended for, which was an actual conversation, not just excessive posts unrelated to one another.

Easier if compulsory reading in pages of books were linked to that particular page or a PDF of that section.

The discussion forums were a bit hectic to keep up with and sometimes I felt it pointless.

I found myself having to go way over the minimal amount of time the website allotted for. It stated at least four hours per week and I had to put in at least 6 or more to gain what I needed.

Too many links to different pages and documents. It's easy to get lost and you don't know 100% what is considered essential reading and what is just supplementary. I ended up reading ahead accidentally.

The course material did not print well at all. Making all of the notes more easily printable would have been very helpful. Also in the first couple of weeks there was so many pages with links that opened into other pages that it was difficult to keep track with which information linked with what.

Repetitive reading content.

It would have been better to go through more of the non-physiotherapy management as this course was open up to more than just physios such as OT and this information is beneficial for physios to know as well. Given the high volume on the Facebook discussion pages it was very difficult to follow even just a few and very difficult to have a general conversation as you could only comment on the discussion thread not on another individual's post.

Facebook discussion because of power problem in my country and timing of the course came in Ramadan.

This course was open to assistants like me and I felt that often times the material covered was out of my scope of practice.

I was confused about how to approach the final assignment.

I used my iPad and sometimes it was difficult to load the textbooks and scroll through pages.

The eBooks were often difficult to navigate through.

There were a lot of people taking this course; therefore the Facebook message board was overwhelming. Maybe next time it would be easier if individuals were broken up into different groups so maybe there was a limit of 50 people per discussion.

Too many people with different experiences.

I found that there were too many hyperlinks in one reading and it got very confusing at times.

Some weeks overwhelming with amount of work required.

## Appendix 8 - Course evaluation: examples of group work

Our amputee Physiotherapist ran a tutorial once per week to discuss the course and our progress.

Our physiotherapy department worked on this as a group and we divided each week's work to one person. We then did the hard work and presented it back to other colleagues with notes and what we felt was the key learning point. It was really enjoyable and less intense that way and perhaps made us more accountable.

I work with my colleagues in artificial limbs and polio centre in Gaza as a group. During meetings we prepared and discussed the case presentation. The group was met once a week at 8:00 clock in the morning for about an hour.

Our group of clinician (PT's) included Inpatient therapists involved in the early rehabilitation, outpatient therapists and therapists involved in the Amputee clinic at our site. We met weekly to discussion the readings, discussion questions and generally discuss the program at Hospital. It created great team learning opportunities. Some of these clinicians have worked with the Amputee population for many years, some of us were very new to this population - a great range of expertise and experience.

I have been working through the course with a colleague and we would do our readings separate and meet up every Thursday to go through the quiz and contribute to the discussion topics weekly.

I worked with a colleague physiotherapist. We discussed some the topics and talked a lot especially about exercises that can be done for the various amputee groups. We practiced on each other and it was very interesting.

I worked alongside a junior staff member that kept us both motivated and is raised discussions for our CPD. We both feel accountable to put into practice the things we have learnt.

I work in an amputee rehab unit and all the physiotherapists that make the team registered for the course. We at times met up and discussed the different topics that pertained most to us and we brainstormed together while using our patients as examples.

Together with an experienced P &O colleague and me (PT) we coached the local staff. We did help with some language problems or difficult topics. We encouraged them on a daily base and did follow up their participation. We had some short gatherings where they could ask questions etc.

We worked as a group and meet every Wednesday from 8:00am to 10:00pm. Its very intrusting for all the participants.

We did practical sessions together in a group of three.

At the ICRC Erbil Physical Rehabilitation Centre we participated in the course with our team. We are about 6 Physiotherapists and 5 P&O technicians. Each week we discussed the subjects of the week and these discussions were useful to improve our experience and our performance with the weekly required tasks.

We met every week up to 6 physiotherapist and the amputee physiotherapist shared information relevant to the hospital and techniques that she uses particularly.

We had a Facebook chat of our own. It is only for monitoring purposes: reminding everyone that there are new messages or announcements, informing everyone if someone finished a course work for that week so that others may be motivated to accomplish it, or something like this.

## Appendix 9 – Course evaluation: selected testimonials

I would like to inform that during the course period I got an interview for job posting in handicap international and I have been selected for the job. This course has helped me a lot to be confident and aware of rehabilitation protocol for amputees and is good to have such experience with more than 5000 from around the globe. Thank you Physiopedia and ICRC.

From this course I also feel like it would be an amazing field of physiotherapy to get involved in, which previously I would never have thought I would like.

It has been an honour to discuss with other professionals and students around the world and it is a great reminder of the rewarding role of physiotherapists and that we are a vital and integral part of a multi-disciplinary team.

I once again enjoyed feeling part of such a large group of people who are interested in learning more and sharing within our profession (and between professions). The sheer number of participants is amazing!

Since I took this amputation course, I look and treat the amputee clients in a different way, paying more attention to stump care, prosthesis care, emphasizing the goals set and consistently working towards independence as tolerated.

Just that is has been an eye-opening experience as a student to see how theory and practice can develop hand-in-hand.

Love these courses!

This course definitely influenced me in my clinical practice. I am already seeing a patient with whom I can use the knowledge gained during the course of rehabilitation. In fact, the case study I submitted is about the new patient I am going to be involved in providing the rehabilitation service.

Other positive influence the course will have on me is that it will help me, and I can use the materials to teach my current physiotherapy assistant students this semester.

Inspiring and innovative: use of social media and online resources was a fantastic way to share excellent learning resources with so many participants on this course. It's been a great 6 weeks of learning.

The Facebook discussions with physiotherapists from different countries provided awesome experience. Overall it was just an amazing learning experience.

I myself have applied the learnings from the course to my patients and results are amazing.

I work on a voluntary basis for a prosthetics centre in Bolivia and am collating the course material as a resource package for the voluntary physiotherapists who visit to work there.

Each and every component was fantastically designed. Additional resource was just boon for my knowledge. Facebook discussion with the team members had cleared all my doubts and Quiz was just perfect to test myself for stop, think and do. I am going to use this knowledge to treat cases in the Association for People with Disability (APD) a non-profit organization based out of Bangalore India.

Can't believe that I actually feel a little sad as well that the whole course is over.

I visit a long-term care facility once in a week where I had a resident with transtibial amputation. I visited him and provided him with guidelines for stump care and exercises as well as use of stump board while sitting prolonged in a w/c. Moreover, I walk with him to figure it out which gait deviations are happening and what could be the reason behind it. To my surprise, that gave me an idea and I focused more on

Quadriceps and Hip Abductors & extensors' strengthening and the gait has improved a lot. Now when this resident, asks me the questions about amputation, I can confidently and truly answer him.

Unfortunately I am very seldom working with amputees. I do work with post op joint replacement patients. One of the pre-op patients was seeing a chiropractor regularly for back adjustments. She came to physiotherapy, I assessed her and noticed she was walking so much out of alignment, that it increased her back mal-alignment. I used the technique from the course to improve her pelvic mobility in gait, regardless of the pain she has in her lower limb. She immediately felt the relief on her back, her gait improved. She had tears of joy in her eyes, now she understood the increasing back pain she has, on top of her painful lower limb. She also realized she could do something about it.

## Appendix 10 – Known examples of impact on clinical practice

### South Africa

This course has motivated us to have a meeting with our OT, dietician & prothetist. We are now starting a post prosthetic rehab program as we feel our patients are not properly trained after discharge from our hospital (they wait a year for prosthesis). We are working on changing the nurses from using soft bandages to semi rigid as per the course. And speeding up the healing process by diet & shortwave therapy. EWA is something we never did before & are now implementing

This course has affected every single member of my department, I can see it in the way they are treating, assessing & referring their amputee patients. We are even doing our journal club using the references and articles from the course so that we continue to learn and expand our knowledge.

### New Zealand

Five or six physios from the hospital where I work did this course so now we have commenced reviewing how we deliver our physio services to amputees with a view to writing a care pathway with other members of the multi-disciplinary team.

### South Africa

This course has opened my eyes to the gaps in our service, and inspired me to keep fighting for access to prosthetics in our area. I hope one day to be at the first (and replicable) district hospital in South Africa with a fully fledged O&P service and real amputee rehab services that are accessible and good quality for people who live in this poorly resourced rural setting.

### Individual course participant

I felt that this course has given me more insight into amputee management and a more holistic view of management. The course has inspired and enabled me to improve our amputee service and also to teach others who are interested in this specific population. It was great to see the diverse ways people work and also how much of a common thread there was when treating amputees around the world.

### Individual course participant

I am interested to discuss with the surgeons the possibility of introducing immediate post-surgical rigid/semi rigid dressings in our hospital, as we don't currently use them and there is evidence in the literature that it prevents acute oedema.