**Malnutrition eLearning Project update**

**April 2013**

**Summary**

There has been significant progress with the Malnutrition Project in a number of areas. The summary of the key facts are:

* Over 2,500 people enrolled on Course 3 Malnutrition course in the last 7 months (October 2012 to April 2013), with over 5,000 expected by September 2013;
* Two other nutrition courses are being used actively.
* High levels of enrolments in “new” countries, with no previous contacts, such as India;
* Success of the grant scheme to progress embedding material in academic institutions;
* Growing number of other partnerships, with other institutions using the material.

**Sources of data**

The project is able to use a wide range of data to help analyse progress. As well as the details recorded when participants enroll and use the courses, a survey was conducted in March 2013, with 140 respondents. Information is also gathered from the analysis of the website traffic using Google Analytics. Participants also provide a steady stream of feedback as well as requests for the certificate of completion.

**Courses available**

There are currently 3 courses on offer on the nutrition portal, and they are:

* C001 Nutrition State and assessment (one module only)
* C002 Measuring Nutritional status to assess risk of ill health
* C003 Caring for infants and children with acute malnutrition

The promotional campaign has focused on the Malnutrition course, but many people have found the other courses on the portal and completed them.

**Levels of use**

The graph and table show the levels of use for the three courses, from July 2012 until March 2013. The numbers of people using the courses have jumped since October, when the Social Media campaign began.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Enrolments by month** | | |  |  |  |  |  |  |  |  |
| Month\Course | Jul-12 | Aug-12 | Sep-12 | Oct-12 | Nov-12 | Dec-12 | Jan-13 | Feb-13 | Mar-13 | Apr-13 |
| C001 | 9 | 4 | 9 | 61 | 165 | 109 | 115 | 165 | 133 | 144 |
| C002 | 0 | 0 | 0 | 0 | 22 | 19 | 18 | 30 | 24 | 32 |
| C003 | 7 | 9 | 15 | 138 | 462 | 296 | 329 | 507 | 354 | 447 |

This shows that there are peaks and troughs, but the numbers are climbing even in the quieter months. The malnutrition course has had over 2,500 people sign up in the 7 months from October 2012 to April 2013. Based on conservative modeling, it should reach 5,000 over a full year (by September 13).

**User demographics**

1. Country analysis: Users of the malnutrition course have come from 104 countries. All country statistics are in appendix one. The top ranking countries are as follows:

|  |  |  |
| --- | --- | --- |
| **Country** | **Course enrolment** | **Other details** |
| Nigeria | High numbers of users building on conference in Nigeria, but also high levels of internet use. | Institutional support from Charles Nkwoala at Michael Okpara University of Agriculture, many of his students signing up, contributing to the 408. |
| India | Starting from just 3 people in October enrolments rose to 90 in March. India likely to be largest user within the next few months. Many new contacts via LinkedIn. | The 325 users are mostly doctors and the majority using the course for CPD. No institutional partners yet. |
| Uganda | Individuals using the course and Makerere University students started to use from April 2013. | Partnership with Makarere began in April through the Malnutrition Grant, and 102 have enrolled on the course in April alone. Most have completed the course or are in progress. The numbers of students will increase. Integration and use of the malnutrition course for Mulago hospital postgraduate training was proposed and the work is in progress. |
| United Kingdom | Steady number of users, significant numbers are MPH students from overseas. | Only institutional user is Southampton School of Nursing. |
| United States | Also individual users, many MPH students. |  |
| Ghana | Individuals using the course, building on existing contacts. | Significant numbers from Kumasi, with Dr Annan using the course. Expected to grow with partnership with Catholic University College of Ghana from June 2013 (Malnutrition Grant). Joana Apenkwa, the PI of the Malnutrition Grant project at the institution, has proposed to do a PhD using the Malnutrition Course for community health workers and mothers’ education. Her supervisor is at KNUST. |
| Kenya | Links established via Social Media and email. | Masinde Muliro University of Science and Technology uses the CD version of the malnutrition course for students, and community and government health workers (applied for the best practice award).  No institutional hosting but lots of interest. |
| Ethiopia | Links established via Social Media and email. | High numbers of individual users, and partnership with Jimma University developing (Jimma is hosting the course). |
| Pakistan | Links established via Social Media and email. | No institutional partners yet, many individual users. |
| Canada | Individuals only |  |
| South Africa | Quite low numbers, considering conference attendance and good internet levels. |  |
| Nepal | Focus of specific LinkedIn campaign, beginning to make an impact with 29 people enrolled so far. | Discussions beginning about institutional use with Chitwan Medical School and Family Development Nepal. |

**2. Analysis of Professions**

The main enrolment database requests details of profession. The largest groups are:

* Doctors
* Public health professionals
* Students (medical, public health, nutritionists)

More detailed information was gained from the user survey. The professions of the 141 included:

|  |  |
| --- | --- |
| * Public health | * 19 |
| * Nutritionist | * 14 |
| * Doctor (excluding paediatricians) | * 10 |
| * Researcher/Student | * 8 |
| * Development or community work | * 6 |
| * Health worker or official | * 6 |
| * Nurse | * 5 |
| * Other | * 5 |
| * Paediatrician | * 5 |
| * Academic | * 4 |
| * Dietician | * 2 |

This agrees with the comments from users, many of whom are doing the course to help with their current jobs. Some academics have used the course material to help prepare for lectures or other presentations. Some have recommended the course to students, but if it is not mandatory, students’ uptake of the course seems low. However, students’ uptake of the course has increased in March and April with academics actively recommending the course as part of their teaching to students in Colombia, Uganda and etc.

Publicity using social media has been focused on some specific groups, such as Public health and doctors with great effect but nurse publicity has not been effective.

**Sources of enrolments**

The survey data from 141 participants in Jan-March 2013 gave the following results.

|  |  |
| --- | --- |
| Options | No. respondents |
| 1. A colleague told me about the course. | 37 (27%) |
| 1. My lecturer/professor recommended the course as part of my studies. | 13 (9%) |
| 1. It was recommended to me by someone who had done the course. | 13 (9%) |
| 1. I received an email from my professional association. | 23 (17%) |
| 1. I received the Malnutrition eLearning newsletter. | 9 (6%) |
| 1. I heard about it at a conference I attended. | 6 (4%) |
| 1. I found it from Google search. | 23 (17%) |
| 1. I found it from social media (LinkedIn, Facebook, Xing, YouTube) | 50 (35%) |
| 1. Other: An email providing the link: 1, from literatures:1 (g?) | 2 |
| Total | 141 |

Theses results are broadly similar to the results from Google analytics (a Google program which provides detail of visitors to the website) from 15th march (the initial set up date) to 20th April, 2013. New visitors to the website can be split into three groups:

* Direct traffic 48% (people typing in the web address), likely from word of mouth, colleague, newsletter, email etc.;
* Referral traffic 42.7% (coming from other websites);
* Search traffic 9.3%, (almost all searching for the course with relevant details, so they have already heard about the course in some way)

Further breakdown of the Referral traffic shows that this is split between:

* LinkedIn 40%
* London School of Hygiene and Tropical Medicine blog 13%
* Facebook 8%
* Emergency Nutrition Network (Ennonline.net) 6%
* UNICEF (Unicef.org) 1%
* International Child Health Group (ICHG.org) <1%
* MPH Programmes List (Mphprogramslist.com) <1%
* Mother and Child Nutrition (Motherchildnutrition.org) <1%
* Global Health Trials (Globalhealthtrials.tghn.org) <1%
* United Nations Security Council Resolution (UNSCR) <1%
* CMAM Forum (Cmamforum.org) <1%
* Other websites ~ 30%

Therefore LinkedIn is producing 40% of all referral traffic, which is 17% of all new visitors to the website with LSHTM website is producing 5% of new visitors.

The survey results showed that the course completion rate of the people, who enrolled the course via LinkedIn, was higher than the average in the period of October 2012 and February 2013. There is no time restriction to the course completion. Therefore, a possible reason could be that they considered the course more valuable for their jobs/work.

However, levels of referral traffic vary over time. New Blogs and new approaches in Social Media may have a big impact initially, trailing off later as the message becomes “old news” for that audience. LinkedIn may be less useful in the future, now that so many people have seen the publicity already. New web links and blogs also have big responses initially, but these drop off over time. New promotional strategies, including institutional and country level work, are currently being explored together with sustainability strategies.

**Issuing certificates**

People, who have completed the course, are sent a certificate of completion, and about 500 have been issued and are being issued (as of 9 May 2013). These are very popular with participants; with many people emailing to ensure their certificates will arrive. The certificates also act as an encouragement for people to complete.

**Malnutrition grants and awards**

The First round of the Malnutrition Grants and Awards scheme was carried out in February 2013, with 7 institutions applying for a grant to support the curriculum integration of the course in their institutions, over 18 months period. The successful institutions were Makerere University, Kampala, Uganda and the Catholic University College of Ghana. The best practice award was won by Dr Reginald Annan, Kwame Nkrumah University of Science and Technology (KNUST), Ghana.

Makerere will begin the curriculum review from September 2013. However, the project team started the work with existing curriculums. The course is being delivered independently to ensure the May nursing graduates get the training before their graduation. And for the nutrition course students started to take the malnutrition course in April (most have completed it) and apply their knowledge during their summer hospital placement work, observing malnutrition management at their work place and writing a reflective report. Pre and post tests were also conducted to assess students’ knowledge gain from the malnutrition course. The project team has developed innovative methods of introducing the malnutrition course to their programmes, and their work is anticipated to help many other institutions with their integration of the malnutrition course to their curricula.

Additionally, Mulago hospital expressed an interest in using the malnutrition course for their postgraduate nutrition training and a proposal is being made to the programme review board.

At the Catholic University College of Ghana (CUCG), the curriculum review will start from summer 2013. They also wanted their summer graduates to take the malnutrition course training before their graduation. Therefore, it was proposed that the malnutrition course will be used and delivered as a stand-alone training to the final year students in June. As briefly mentioned in the user demographics summary, Joana Apenkwa, the PI of the Malnutrition Grant project at Ghana, requested the use of the malnutrition course for her PhD – using the course to train community health workers and mothers. She had her first meeting with her supervisor at KNUST to discuss her ideas. Her ideas were received well and she is currently writing a proposal. This has a potential to link Dr Annan’s work at KNUST and Joana’s at CUCG, perhaps helping to create a malnutrition capacity building leadership team in Ghana.

The 2nd round of the Malnutrition Best Practice Award call is now open with 16 May as its closing date.

**Working with partners**

Links have been made with a wide range of organizations and individuals, who have or are helping promote the course.

These include:

* Heather Smithard, running South African nursing website [www.websister.co.za](http://www.websister.co.za)
* Southampton School of Nursing (using the course on Nursing BSc)
* Anja Lipperts and colleagues who took CD’s from Holland to Kunmi, Eastern Uganda
* Charles Nkwoala, Umudike has been using the course for his undergraduate Nutrition course in Nigeria
* LINGO’s (training for NGO’s) is in the process of installing course on their server, to help train NGO staff (potentially 130,000)
* Nnodi Atulomah has used the course for dozens of MPH and BSc Public Health students in Nigeria
* Lucia Mbofana is using the material to train staff in Haiti and considering its use for slum youth training
* Dr Demeke Mekonnen is installing the course on the server at Jimma University, Ethiopia so that it can be used in pediatric training
* Dr Mercedes in Bogotá, Columbia has recently used the course with 25 of her medical students
* Silvenus Ochieng Konyole, Masinde Muliro University of Sciences and Technology, Kenya, has used the course (CD version) to teach students, health facilities staff and volunteer community health workers.
* Dr Raja Dhungana, Kathmandu, Nepal, wants to use the course at Chitwan Medical College and for Nepal Family Development Foundation Nepal.
* London School of Hygiene and Tropical Medicine (Including blog on website)
* Dr Su Ange, the founder of Medium Myanmar, Myanmar for teaching orphans.
* Links from website of various organizations listed above.

**Conclusion**

The Malnutrition eLearning Project has made significant steps forward over the last year, with the material being used widely across the world. Numbers of participants have grown significantly and a growing number of institutions are also making use of the material.

The use of eLearning to address the need for malnutrition training across the world is being proved as viable and effective.

As the number of institutions and academics/clinicians who have interests in using the course for UG and PG training is increasing. The next step of the UK project team’s work is to develop strategies of how to work with these people to establish malnutrition capacity building lead teams in these countries, ways to sustain both the UK and country teams, etc.

**Appendix one**

Countries using the malnutrition course C003, by month

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Sep-12** | **Oct-12** | **Nov-12** | **Dec-12** | **Jan-13** | **Feb-13** | **Mar-13** | **Apr-13** | **Total** |
| Nigeria | 27 | 57 | 133 | 52 | 52 | 45 | 22 | 20 | 408 |
| India |  | 3 | 42 | 53 | 30 | 70 | 90 | 37 | 325 |
| Uganda | 2 | 1 | 15 | 4 | 8 | 16 | 8 | 140 | 194 |
| United Kingdom | 3 | 17 | 39 | 15 | 31 | 27 | 31 | 27 | 190 |
| United States | 1 | 2 | 40 | 16 | 27 | 46 | 28 | 29 | 189 |
| Ghana | 12 | 25 | 11 | 16 | 11 | 40 | 16 | 12 | 143 |
| Kenya |  | 3 | 28 | 14 | 18 | 31 | 15 | 19 | 128 |
| Ethiopia |  | 0 | 10 | 13 | 17 | 23 | 11 | 7 | 81 |
| Pakistan |  | 0 | 9 | 5 | 14 | 22 | 14 | 16 | 80 |
| Canada |  | 0 | 13 | 4 | 8 | 9 | 4 | 7 | 45 |
| South Africa |  | 3 | 4 | 3 | 10 | 9 | 6 | 2 | 37 |
| Nepal |  |  | 3 | 7 | 2 | 9 | 8 | 6 | 35 |
| Somalia |  |  | 3 | 5 | 2 | 13 | 2 | 6 | 31 |
| Malawi |  | 1 | 5 | 1 | 2 | 8 | 3 | 8 | 28 |
| Spain |  |  | 2 | 1 | 4 | 5 | 5 | 6 | 23 |
| Sudan |  | 1 | 0 | 1 | 1 | 15 | 2 | 3 | 23 |
| Tanzania, United Republic of | 1 | 0 | 0 | 4 | 6 | 0 | 4 | 7 | 22 |
| Columbia |  |  |  |  |  |  | 9 | 12 | 21 |
| Australia |  |  | 5 | 3 | 5 | 5 |  | 3 | 21 |
| Bangladesh |  |  | 4 | 1 | 2 | 4 | 8 | 1 | 20 |
| Netherlands |  | 1 | 4 | 6 | 3 | 3 | 2 | 1 | 20 |
| Italy |  | 4 | 3 | 3 | 1 | 0 | 1 | 6 | 18 |
| Burkina Faso |  |  | 5 | 2 | 5 | 1 |  | 5 | 18 |
| Rwanda |  |  | 4 | 1 | 1 | 3 | 4 | 5 | 18 |
| Cameroon |  | 1 | 3 | 1 | 1 | 8 | 3 |  | 17 |
| Haiti |  | 0 | 4 | 0 | 7 | 1 | 4 |  | 16 |
| Gambia |  |  | 2 | 4 | 2 | 3 | 2 | 2 | 15 |
| Zambia |  | 3 | 4 | 2 | 2 | 3 |  |  | 14 |
| France |  |  | 2 | 4 | 1 | 0 | 4 | 2 | 13 |
| Switzerland |  |  | 1 | 2 | 5 | 1 | 2 | 2 | 13 |
| Zimbabwe |  |  |  |  |  | 4 | 5 | 3 | 12 |
| Indonesia |  |  |  | 4 | 4 | 2 |  | 1 | 11 |
| Egypt |  |  | 1 | 2 | 2 | 1 | 2 | 2 | 10 |
| Philippines |  |  | 1 | 1 | 2 | 3 |  | 3 | 10 |
| Sri Lanka |  |  | 2 | 1 | 2 | 1 | 2 | 2 | 10 |
| Afghanistan |  |  | 3 | 1 | 3 | 3 |  |  | 10 |
| Belgium | 1 |  | 4 | 1 | 1 | 0 |  | 2 | 9 |
| Portugal |  |  | 2 | 3 | 2 | 2 |  |  | 9 |
| South Sudan |  |  |  |  | 1 | 2 | 6 |  | 9 |
| Botswana |  | 1 |  |  | 4 | 2 |  | 1 | 8 |
| Myanmar |  |  |  |  |  | 3 | 1 | 4 | 8 |
| Denmark |  |  | 2 | 1 | 1 | 1 | 1 | 1 | 7 |
| Finland |  |  | 1 |  | 2 | 0 |  | 4 | 7 |
| Senegal |  | 1 |  |  | 3 | 0 | 3 |  | 7 |
| Ireland |  |  |  |  | 1 | 1 | 2 | 2 | 6 |
| Saudi arabia |  |  |  |  |  | 4 | 2 |  | 6 |
| Germany |  |  | 2 |  | 1 | 0 |  | 2 | 5 |
| Yemen |  |  |  |  |  | 3 | 1 | 1 | 5 |
| Burundi |  |  |  |  |  | 3 |  | 1 | 4 |
| China |  |  |  | 1 | 1 | 2 |  |  | 4 |
| Fiji |  |  |  |  |  |  | 3 | 1 | 4 |
| Liberia |  | 1 | 1 |  | 1 | 1 |  |  | 4 |
| Mali |  |  |  |  |  | 2 | 2 |  | 4 |
| Sweden |  |  |  |  |  | 3 |  | 1 | 4 |
| Benin |  |  |  |  |  | 2 |  | 1 | 3 |
| Chad |  |  |  |  |  | 1 |  | 2 | 3 |
| Cote d'Ivoire |  |  |  |  |  | 1 |  | 2 | 3 |
| Japan |  |  |  | 1 | 2 | 0 |  |  | 3 |
| Lesotho |  |  |  |  |  | 3 |  |  | 3 |
| Lithuania |  |  | 1 |  | 1 | 0 | 1 |  | 3 |
| Macedonia, The Former Yugoslav Republic of |  |  | 1 |  | 2 | 0 |  |  | 3 |
| Madagascar |  |  |  |  |  |  | 2 | 1 | 3 |
| Morocco |  |  |  |  | 1 | 1 | 1 |  | 3 |
| Namibia |  |  |  |  |  | 2 | 1 |  | 3 |
| Taiwan |  |  |  |  | 1 | 2 |  |  | 3 |
| Ukraine |  |  |  |  | 1 |  | 1 | 1 | 3 |
| Australia |  |  |  |  |  |  | 2 |  | 2 |
| Ecuador |  |  |  |  |  |  | 1 | 1 | 2 |
| Greece |  |  | 1 |  | 1 | 0 |  |  | 2 |
| Guatemala |  |  |  |  |  |  | 2 |  | 2 |
| Hong Kong |  |  |  |  |  | 1 |  | 1 | 2 |
| Korea, Republic of |  |  |  |  |  | 1 | 1 |  | 2 |
| Lao |  |  |  |  |  | 2 |  |  | 2 |
| Lebanon |  |  |  |  |  | 2 |  |  | 2 |
| New Zealand |  |  |  |  |  | 1 |  | 1 | 2 |
| Norway |  |  |  |  |  |  | 1 | 1 | 2 |
| Papua New Guinea |  |  |  |  | 1 | 1 |  |  | 2 |
| Peru |  |  |  |  |  | 1 |  | 1 | 2 |
| Saint Lucia |  |  |  |  |  |  | 2 |  | 2 |
| Syrian Arab Republic |  |  |  |  |  | 2 |  |  | 2 |
| United arab republic |  |  |  |  |  | 2 |  |  | 2 |
| Algeria |  |  |  |  | 1 | 0 |  |  | 1 |
| Brazil |  |  |  |  |  | 1 |  |  | 1 |
| British Indian Ocean Territory Count |  |  |  |  |  |  |  | 1 | 1 |
| Cambodia |  |  |  |  |  | 1 |  |  | 1 |
| DRK |  |  |  |  |  | 1 |  |  | 1 |
| Honduras |  |  |  |  |  | 1 |  |  | 1 |
| Hungary |  |  |  |  |  |  | 1 |  | 1 |
| Iraq |  |  |  |  | 1 | 0 |  |  | 1 |
| Iran, Islamic republic of |  |  |  |  |  |  |  | 1 | 1 |
| Israel |  |  |  |  |  |  | 1 |  | 1 |
| Jamaica |  |  |  |  | 1 | 0 |  |  | 1 |
| Malaysia |  |  |  |  |  | 1 |  |  | 1 |
| Niger |  |  |  |  |  | 1 |  |  | 1 |
| Palestinian Territory, Occupied |  |  |  |  |  |  | 1 |  | 1 |
| Poland | 1 |  |  |  |  | 0 |  |  | 1 |
| Samoa |  |  |  |  |  |  | 1 |  | 1 |
| Sierre Leone |  |  |  |  |  | 1 |  |  | 1 |
| Singapore |  |  |  |  |  | 1 |  |  | 1 |
| Swaziland |  |  |  |  |  |  |  | 1 | 1 |
| Thailand |  |  |  |  |  |  |  | 1 | 1 |
| Timor-Leste |  |  |  |  |  |  |  | 1 | 1 |
| Togo |  |  |  |  |  |  | 1 |  | 1 |
| Trinidad and Tobago |  |  |  |  |  | 1 |  |  | 1 |
| Turkey |  |  |  |  |  | 1 |  |  | 1 |
| Uzbekistan |  |  |  |  |  | 1 |  |  | 1 |
| Venezuela |  |  |  |  | 1 | 0 |  |  | 1 |
| Viet Nam |  |  |  |  |  | 1 |  |  | 1 |

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