

Engaging nurses in prevention of non-communicable disease 2013–2016

Final Report



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Executive summary

Funding from the Burdett Trust for Nursing has had a massive impact by enabling C3 Collaborating for Health (C3) to engage some of the world's 19 million nurses in preventing non-communicable diseases (NCDs), particularly diabetes, cardiovascular disease, chronic lung disease and some cancers, by promoting healthy behaviours and lifestyles. C3 believes that with the right knowledge, skills and opportunities, nurses are uniquely placed to help address this global challenge.

The Burdett funding has enabled C3 to expand its reach as a respected and knowledgeable voice in NCD prevention in the nursing community both globally and in the UK, and to use its global nursing network to raise awareness, engage and educate nurses and create opportunities for them to share their knowledge and expertise locally, nationally and internationally.

Because of the partnership between the Burdett Trust and C3, increasing numbers of nurses are informed about NCDs and their role in prevention, and have committed to ongoing engagement. We estimate that over the three-year course of this project we have spoken directly through conferences, meetings and events to approximately 3,000 nurses and other health personnel and enabled health screening for approximately 900 people. Key messages and activities related to the contribution of nurses, at all levels and in all settings, are reaching a wider audience through publications in UK and international journals, the use of social media and radio and television interviews.

The three-year programme had four main elements with a wide range of critical outcomes:

- The **nursing student intervention study**, in collaboration with London South Bank University, involved 375 students and contributed to the evidence base around nurses' health and its impact on practice and generated a high level of interest particularly among international nursing academics and showed that:
 - The health of student nurses was not significantly different from that of the general population although there were lower smoking rates; the majority of participants failed to meet current recommendations around physical activity, and were not active frequently enough for health benefit.
 - Engagement in physical activity significantly predicted whether a student would talk to patients about exercise. Unhealthy lifestyles such as smoking or obesity may make a nurse less likely to offer health promotion advice and any such messages may be viewed as less credible by patients.
 - By the end of their course over a third of students claimed not to have had a healthy conversation with a patient. Review and reform of the pre-registration curriculum may be necessary to ensure that student nurses are equipped with the best skills and resources to engage in effective health promotion practice.
 - The majority of the cohort thought that it was important for a student nurse to be a role model of healthy behaviour and yet almost a third of participants also felt that lifestyles were a private matter and nurses' lifestyles made no difference to patients. Evidencing a healthier lifestyle at baseline was related to a positive attitude towards role modelling but did not appear to influence whether or not the student engaged in healthy conversations with patients. Smoking was consistently negatively associated with attitudes towards role modelling and health promotion.
 - The three interventions piloted – educational input on how to have a healthy conversation with a patient; an online wellness tracker; and an accelerometer – were acceptable to students, but there were other barriers to providing feedback on these interventions. The study highlighted several challenges for health initiatives with student nurses, including lack of time while on placement; lack of health awareness and self-care in the nursing curriculum; lack of curriculum space for health promotion education including development of knowledge and skills to address health lifestyles; stress; and irregular routine.

- A **diaspora** project, enabled C3 to engage with nurses and others from different countries working and living in the UK but still connected to their home countries. C3 worked mainly with the Uganda Diaspora Health Foundation (UDHF), and together were successful in raising awareness, sharing information, delivering educational programmes and supporting grassroots initiatives.
 - Stimulated by a well-received workshop in Kampala (2014), which highlighted the importance of NCD prevention among people with mental health problems, a new programme was instituted by East London NHS Foundation Trust to focus on improving the physical health of patients in Butabika Hospital, the national referral mental health institution in Uganda.
 - A very popular and over-subscribed workshop on physical activity, was reported in a peak time television news programme in Kampala and in local newspapers and included an interview with a C3 representative, thus reaching many tens of thousands of people. Diaspora colleagues have been involved in further work with local authorities and football teams who are very keen to promote the links between physical activity and health.
 - A *Community Dialogue and Engagement* project in Mubende, Uganda, involving 573 participants resulted in a significant increase in knowledge and 60 per cent of participants committing to changing their lifestyles in order to address the risk factors. Many of the participants said they would share the information with others, particularly in relation to the dangers of tobacco use and the different ways it can affect their families.
 - Feedback from the midwives and 34 expectant mothers in the co-created *Healthy Mothers: Healthy Babies* project in Uganda indicated that the intervention helped create a positive relationship between them, and made a positive link between the mothers and the health facility services. The midwives realised their vital role in health promotion and the importance of integrating healthy lifestyles and NCD prevention into their antenatal care and other health activities.
 - A joint C3 UDHF stand at the 2014 and 2015 Uganda UK Conventions, attended by over 2,000 participants, attracted a constant stream of people interested in talking about NCDs and mental health. Of the 70 participants who took up the offer of having their blood pressure checked 80 per cent had raised or high blood pressure and were given appropriate advice.
- **International engagement** was enhanced as a result of the funding from the Burdett Trust which enabled C3 to engage successfully with nursing audiences from across the globe, including national, international and global nurse leaders, influencers and opinion makers, with the aim of highlighting the increasing epidemic of NCDs and the potential contribution and opportunities for nurses to help prevent them. C3 estimates that in the course of our three-year partnership with the Burdett Trust, we have addressed directly approximately 3,000 nurses and other health personnel.
- **Information and resources.** C3 increasingly uses technology and social media to engage with and inform nurses.
 - C3 established a twitter account @C3Nursing to enhance communication about the nursing contribution to NCD prevention which now has over 620 followers and complements our primary Twitter account, @C3health, which has 3,464 followers. C3's director, Christine Hancock, has 1,749 LinkedIn connections, many within the nursing field, with whom she shares regular updates.
 - C3 uses online networks to share information and stimulate discussion including HIFA 2015 (Health Information for All by 2015); Global Health Delivery online; and the Global Alliance for Nursing and Midwifery (GANM).
 - C3 led the development of guidelines to share good nursing and social work practices in prevention in eHealth services (telehealth and telecare) across the EU, through the evaluation and consensus building. The work was commended by the EU Commission and launched at the EU Parliament. <http://www.ens4care.eu/>

Conclusion

C3 is confident that the Burdett funding has been used to maximum effect to engage and empower nurses in NCD prevention as evidenced by a range of impacts and outcomes resulting from this three year programme and listed in Annex 1. C3 looks forward to a continuing partnership with the Burdett Trust to address one of the greatest challenges to health and development across the world.

Annex 1

Key outcomes and impacts include the following:

C3 estimates that over the three-year course of this project C3 has spoken directly through conferences, meetings and events (not including publications, social media, television and radio interviews) to approximately 3,000 nurses and other key stakeholders, over half of whom are at senior level in national and international organisations, and enabled health screening for approximately 900 people.

The Healthier Nursing Students intervention study engaged 375 nursing students and contributed to the evidence base around nurses' health and its impact on practice, and generated a high level of interest particularly among international nursing academics. The study has been widely disseminated through international conferences and publications.

The study will contribute to the evidence base on the health of the NHS workforce and to further work aimed at addressing obesity among nurses, and was instrumental in the achievement of A Health Innovation Award by LSBU and C3 to conduct a social marketing campaign in the NHS, entitled "First impressions count".

The final report has also been shared with the Nursing and Midwifery Council, highlighting the insights and conclusions that impact on pre-registration curricula and ongoing professional practice.

C3 was successful in sharing information, delivering educational programmes and supporting grassroots initiatives by nurses and others at workshops in Kampala (2014) and Mubende and Kira (2015), as well as raising awareness among tens of thousands of people in Uganda. Diaspora colleagues, keen to build on this initiative, have been involved with local authorities and football teams who are interested in promoting the links between physical activity and health.

Stimulated by the workshop in Kampala (2014), which highlighted the importance of NCD prevention among people with mental health problems, a new programme was instituted by East London NHS Foundation Trust to focus on improving the physical health of patients in Butabika Hospital, the national referral mental health institution in Uganda.

The *Community Dialogue and Engagement* project in Mubende (2015), involving 573 participants resulted in a significant increase in knowledge and 60 per cent of participants committing to changing their lifestyles in order to address the risk factors. Many of the participants said they would share the information with others, particularly in relation to the dangers of tobacco use and the different ways it can affect their families.

The *Healthy Mothers: Healthy Babies* project in Mubende (2015) helped create a positive relationship between the midwives and expectant mothers and made a positive link between the mothers and the health facility services. The midwives realised their vital role in health promotion and the importance of integrating healthy lifestyles and NCD prevention into their antenatal care and other health activities.

A joint C3 UDHF stand at the 2014 and 2015 Uganda UK Conventions, attended by over 2,000 participants, attracted a constant stream of people interested in talking about NCDs and mental health. Of the 70 participants who took up the offer of having their blood pressure checked 80 per cent had raised or high blood pressure and were given appropriate advice.

The relationships made with the various stakeholders and organisations and the ways of working that were developed in the diaspora project, have been very positive and supportive and have resulted in requests from Zimbabwe, Sierra Leone and Ghana, that C3 consider doing similar work with them.

As a result of C3's international nursing expertise, highlighted by the diaspora project with Uganda, C3 was invited by Nottingham Trent University to act as advisor to a project aimed at building capacity of Community Health Workers in Uganda.

C3 engaged successfully, mainly through meetings and conferences, with nursing audiences from across the globe, including national, international and global nurse leaders, influencers and opinion makers, with the aim of highlighting the increasing epidemic of NCDs and the potential contribution and opportunities for nurses to help prevent them.

C3 has expanded its reach by using technology and social media to engage with and inform nurses.

C3 led the development of guidelines to share good nursing and social work practices in prevention in eHealth services (telehealth and telecare) across the EU, through the evaluation and consensus building. The work was commended by the EU Commission and launched at the EU Parliament.

C3's position as a global leader in engaging nurses in NCD prevention is further evidenced by an invitation to make a presentation on the threat to health security of NCDs to the 2016 Commonwealth Civil Society Forum in May in conjunction with the annual Commonwealth Health Ministers' meeting in Geneva on the eve of the World Health Assembly; and to participate in the Global Advisory Panel on the Future of Nursing and Midwifery (GAPFON) European Regional meeting in Amsterdam, 1-2 June 2016. Furthermore, C3's director has been invited to sit on the NHS Healthy Workforce Advisory Board.

Building on the evidence from the intervention study which indicated that motivation of nurses to change their behaviour comes from a view that they should 'practice what they preach', and an increasing interest in nurses' health generated by the study, C3 and LSBU were awarded an innovation grant by the Health Innovation Network, South London, to raise awareness of personal health and wellbeing in the NHS workforce using a social marketing campaign. The campaign will run in three NHS Trusts in London, from April – September 2016.

C3 collaborated with the International Council of Nurses to submit a proposal to establish and mobilise a European network of tobacco-control nurses, the outcome of which will be announced in June 2016.

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Introduction

C3 Collaborating for Health is pleased to report the success of a three-year programme, funded by the Burdett Trust for Nursing, aimed at engaging some of the world's 19 million nurses in preventing non-communicable diseases (NCDs), particularly, cardiovascular disease, type 2 diabetes, many cancers and chronic lung disease. In the course of our three-year partnership with the Burdett Trust, we have addressed directly (not including publications, social media, television and radio interviews) approximately 3,000 nurses and other key stakeholders, over half of whom are at senior level in national and international organisations, and we have facilitated nurses in carrying out nearly 900 health screenings.

The Burdett Trust provided C3 with funding of £100,000 per year for three years, (April 2013- March 2016), to develop and implement an agreed programme of activities. This section of the report describes in further detail the various projects within that programme, their outcomes and impact, together with evidence of the transformative impact of the Burdett funding on C3's capacity to engage with the UK and global nursing community and to provide a nursing voice at different levels of national, international and global policy and practice.

The funding enabled C3 to appoint a part-time senior nurse to lead and manage the three-year programme, which focused on:

- 1) working with an academic partner to support nursing students in making healthier life choices and enhancing their role as health educators in clinical practice;
- 2) partnering with diaspora nurses, i.e. nurses from other countries who are living and working in the UK, to contribute to NCD prevention among their communities here and in their home countries;
- 3) engaging with international nurse leaders to promote and support NCD prevention; and
- 4) identifying and facilitating access, by nurses, to up to date information and educational resources.

This report is complemented by two previous annual updates; two interim reports and a final report of the nursing student intervention study; and three reports related to the work with the Uganda Diaspora Health Foundation and the Uganda NCD Alliance.

C3 Collaborating for Health

C3 Collaborating for Health is a global charity, based in London, and focused on prevention of NCDs, particularly cardiovascular disease, diabetes, many cancers and chronic lung disease, which the World Health Organization has designated as being the four major NCDs. These diseases are responsible for the majority of premature deaths and disease throughout the world, but are often under-reported, under-acknowledged and under-funded. The majority of these diseases can be prevented or delayed by tackling the three major risk factors: stopping smoking, eating a better diet (including avoiding the harmful use of alcohol) and increasing physical activity.

C3 brings together policymakers, health professionals, businesses, government, teachers, young professionals, academics and others to design ways to make it easier to be healthy, to put these ideas into action and to promote the necessary behaviour changes. C3's areas of work span low-, middle- and high-income countries. C3:

- organises events that bring together people from many different sectors to share ideas, develop policies and catalyse action to improve health;
- works with businesses to help focus their core activities in more healthy ways;
- helps to develop fresh approaches to promoting health in the workplace;
- works with health professionals, particularly nurses, to change attitudes to health and healthcare; and
- works with local organisations to improve health in communities.

C3 model for engaging nurses

There are more than 19 million nurses and midwives worldwide and in some countries nurses are the only health professionals that people encounter. C3 believes that with the right knowledge, skills and opportunities, nurses are uniquely placed to help prevent NCDs by promoting healthy behaviours and lifestyles. C3 uses its international expertise and extensive global nursing network to raise awareness, engage and educate the nursing community, and create opportunities for nurses to share their knowledge and expertise locally, nationally and internationally.

C3 informs, educates and engages nurses in NCD prevention and helps them to:

- improve their own health;
- educate and promote health among patients, families and communities, including in schools and workplaces;
- disseminate knowledge and promote skills development among colleagues and health workers; and
- influence key stakeholders and advocate at every level to prevent NCDs.

Programme of activities

This section of the report focuses on the four main projects which were included in the 3 year programme.

1) Healthier Nursing Students

C3 commissioned London South Bank University (LSBU) to carry out an intervention study with nursing students (August 2013 - January 2016) to investigate their health status and attitudes towards health promotion practice. Interim reports were provided in March 2014 and March 2015 and the final report is available <http://www.c3health.org/wp-content/uploads/2013/11/C3-student-nurses-intervention-study-report-final-january-2016-min.pdf>

Background

Given the rising prevalence of preventable diseases caused in part by poor lifestyle choices, encouraging people to think about their health, whatever their profession, is important. As the largest occupational group in the NHS, many nurses and student nurses, who are the next generation of “health promoters”, are said to be obese, smokers, and are not active enough to benefit their health, drink alcohol in excess of recommended levels and/or have a poor diet (Blake et al. 2011). Student nurses have the same influences on their health behaviours as others in the population but additionally, nursing is a stressful and demanding role in busy environments with challenging shift systems that can mean nurses have fewer opportunities to make changes to their lifestyle. Despite the centrality of health promotion in all nurses’ roles and some teaching in the curriculum, nurses’ own health is not addressed.

It has been found that nurses’ personal health behaviour may affect their counselling of patients about lifestyle (Clément et al 2002). Nurses who are themselves unhealthy may be less willing to discuss lifestyle and health behaviours with patients (Esposito & Fitzpatrick 2011; Wright 1998). Some nurses may feel that they must manage impressions that they are poor role models, which in turn may inhibit them from raising lifestyle and health behaviour issues with patients (Brown & Thompson 2007; Heath et al. 2004). Health behaviours and lifestyle may be sensitive issues to discuss with patients regardless of the nurse’s personal behaviours, but the avoidance of these topics altogether has serious implications for practice.

As they tend to have more contact with patients and their families than any other healthcare professionals, nurses are well positioned to provide health promotion advice and support for lifestyle behaviour



change. However, the credibility of nurses' advice may be compromised if they appear hypocritical to the recipients of that advice (Aranda & McGreevy 2014; Hicks et al. 2008). Patients expect nurses to 'practice what they preach' and may tune out those who do not personally engage in the behaviours they are seen to promote. Rush, Kee and Rice (2005) noted that nurses themselves perceive an expectation from wider society to be healthy role models.

Aside from the implications for individual nurses, the benefits of a healthier nursing workforce are manifold. There are known links between employee health and wellbeing and sickness absence, absenteeism, and workplace accident and errors (e.g. Mills et al. 2007). The Boorman Review (Boorman 2010) flagged high levels of sickness absence in the NHS and associated lost working days, which if reduced by one-third would lead to an estimated annual direct cost saving to the NHS of £555m. Unhealthy nurses may have higher sickness absence rates and lower productivity (Roelen et al. 2013; Torres Lana et al. 2005). This is undoubtedly problematic in the face of an aging workforce with low retention and an already overstretched NHS. Previous research suggests that healthier nurses may evidence significantly lower sickness absence, greater job satisfaction and greater organisational commitment (Blake et al. 2013). Nurses who maintain a healthy lifestyle may be better equipped to keep up with the demands of their busy roles.

Objectives

The Healthier Nursing Students project was designed to meet the following objectives:

- To assess the self-reported health of a cohort of student nurses and to investigate whether self-reported health improved or worsened over a two-year period of being a student nurse.
- To explore any relationship between student nurses' self-reported health status and the intention to undertake health promotion brief advice with patients.
- To investigate the effectiveness of three types of interventions on student nurses' self-reported health behaviours.
- To explore the enablers and barriers to student nurses being healthy role models.

Methodology

The study included a literature review and three types of interventions to encourage the adoption of healthier lifestyles: education, a pulse accelerometer recording steps, and an online personal wellness tracker. Several items explored students' likelihood of engaging in health promotion practice with patients: training received, self-reported confidence, attitudes to being a role model. Just over 370 nursing students in their final two years of training, across all fields of nursing (mental health, learning disability, adult, children's) and from both LSBU campuses (Southwark and Havering) were included in the study.

Key findings and conclusions

- The health of student nurses was not significantly different from that of the general population although there were lower smoking rates; the majority of participants failed to meet current recommendations around physical activity, and were not active frequently enough for health benefit.
- The self-reported health status of the student nurse cohort did not change over the last two years of their course although a third of students reported that their health got worse over their training. Stress, lack of time and irregular routine were cited as barriers to a healthy lifestyle, whereas getting regular exercise was noted as related to staying healthy, so there may be a 'critical time' when student nurses may benefit from advice or support in maintaining a healthy lifestyle while on placement.
- Engagement in physical activity significantly predicted whether a student would talk to patients about exercise. A systematic review conducted as part of research associated with this study found that positive health behaviours such as physical activity may influence willingness to undertake

health promotion. Unhealthy lifestyles such as smoking or obesity may make a nurse less likely to offer health promotion advice and any such messages may be viewed as less credible by patients.

- Students had received little training in public health messages or methods of engaging with patients such as ‘making every contact count’ (MECC) and by the end of their course over a third claimed not to have had a healthy conversation with a patient, nevertheless, reported levels of confidence in talking to patients were quite high. Evidencing a healthier lifestyle at baseline was related to a positive attitude towards role modelling healthy behaviours but did not appear to influence engaging in healthy conversations with patients.
- The majority of the cohort thought that it was important for a student nurse to be a role model of healthy behaviour but almost a third of participants felt that lifestyles were a private matter and nurses’ lifestyles made no difference to patients. Smoking was consistently negatively associated with attitudes towards role modelling and health promotion. Nurse educators may need to examine their own lifestyles to ensure they too meet the role modelling expectation that they are aiming to engender in the student population.
- Of the three interventions piloted, having an educational input on how to have a healthy conversation with a patient was regarded as most useful; the online wellness tracker was quite well received and used by a third of the student nurse cohort. The accelerometers were taken up in large numbers when distributed in class, although only a minority of those who took an accelerometer inputted their data onto the Moodle site. Similarly, the educational session on ‘Making Every Contact Count’ was well received by students, but only a handful completed the placement reports on having a ‘healthy conversation’ with patients. This suggests that although the interventions themselves were acceptable to students, there were other barriers to providing feedback on the interventions.
- The study highlighted several challenges for health initiatives with student nurses, including lack of time while on placement; lack of health awareness and self-care in the nursing curriculum; lack of curriculum space for health promotion education including development of knowledge and skills to address health.
- The Nursing and Midwifery Council (NMC) competencies for pre-registration nursing education state that the awareness and provision of lifestyle advice is indicative content for nurses to provide holistic care to patients (NMC 2010). Therefore, there is not only a strong recommendation, but an explicit educational requirement for nursing faculties to provide education on discussing lifestyles with patients. Review and reform of the pre-registration curriculum may be necessary to ensure that student nurses are equipped with the best skills and resources to engage in effective health promotion practice.
- The NMC requires nurses to self-monitor in order to assess good character and good health. Nurses are required to self-declare their ‘good health and good character’ at the point of, and when renewing their registration (NMC, 2010). Nurses who evidence poor health behaviours could be in breach of the Code if they fail to carry out health promotion (and thus put patients at risk) because of their personal lifestyles. The introduction of minimum physical fitness requirements, as seen in other professional public-facing groups, such as the police or military, could be introduced to ensure that those entering the profession have a baseline standard of health.

Dissemination

When discussed at conferences and events this study has generated interest, particularly among academics, from different parts of the world. It has been disseminated at conferences of the Commonwealth Nurses Federation 2014, attended by over 200 senior nurses from 26 countries, and the RCN research conference 2015, where it aroused a great deal of interest. It has been reported twice in the *Nursing Standard*, the UK’s biggest circulation weekly nursing journal. A paper on the study is being prepared for publication.

This study has also contributed to a wider body of work on workforce health in the NHS that includes a doctoral study on nurses as role models to be completed in 2016 and which includes a paper *Should nurses*

be role models for health? A modified Delphi study, submitted for publication to an international peer reviewed journal.

A systematic review has been completed and is being submitted for publication *Do nurses' personal health behaviours impact on patient outcomes? A systematic review*.

The study will contribute to the evidence base for further work aimed at addressing obesity among nurses, and was instrumental in the achievement of A Health Innovation Award by LSBU and C3 to conduct a social marketing campaign in the NHS, entitled "First impressions count".

The final report has also been shared with the NMC highlighting the insights and conclusions that impact on pre-registration curricula and ongoing professional practice, and suggesting that opportunities could be explored to replicate the study.

2) Diaspora

The diaspora nursing programme focuses on work with nurses and health professionals from other countries, who are living and working in the UK and still engaged with colleagues and communities in their home countries. Our twofold aim was to promote the health and wellbeing of communities in the home countries as well as Black Minority Ethnic (BME) communities in the UK, who, for different reasons, have poorer health status and may be at greater risk of NCDs than the general population of the UK. The programme used lessons learned from their home countries, and was influenced by the concept of 'turning the world upside down', which is promoted by Lord Nigel Crisp (Crisp 2010).

The project has succeeded in raising awareness, sharing information, offering educational programmes and supporting grassroots initiatives through various meetings, presentations, activities and networking events. Our most significant involvement and greatest impact in our diaspora project is our collaboration with the Uganda Diaspora Health Foundation (UDHF), a London-based foundation established in 2011, which aims to build the capabilities, capacity, skills and leadership of health workers, and increase the involvement of users and carers in the development of health services in both the UK and Uganda; and the Kampala based, Uganda NCD Alliance (UNCDA), established in 2010, in partnership with the Danish NCD Alliance, with funding from the Danish International Development Agency. C3 was also a founding member of the Uganda UK Health Alliance, a partnership of UK-based and Uganda-based organisations that share a common interest in health developments in Uganda. Chief Nurse, Ms. Enid Mwebaza, Assistant Commissioner for Health for Nursing in the Ugandan Ministry of Health was a key speaker at the launch and continues to maintain contact with C3. Her participation helped highlight the contribution of nurses to Ugandan and UK health systems and the opportunities to learn from each other. C3 is particularly interested in finding innovative ways of engaging with BME communities in the UK.

Lord Crisp made a point of highlighting that the lesson learning is a two-way process. UK health workers visiting Uganda learn a huge amount from their experience, they have grown to respect and admire the work of many of the dedicated professionals that they meet, and they bring that learning and enthusiasm back to the NHS. He highlighted that this 'co-development' is a two-way process from which we all benefit.

Uganda diaspora

The Ugandan diaspora project focused on raising awareness, informing and educating nurses, health workers and other health personnel in NCD prevention. A key principle of our approach was to identify and facilitate local nurses and other health experts to engage with their colleagues and local communities. In 2014 we supported a member of the UDHF to help with the delivery of a workshop in Kampala that we had initiated and co-designed with UDHF and UNCDA.

Kampala, 2014

C3 worked closely with UDHF and UNCDF to develop and deliver an education and awareness raising intervention incorporating both physical and mental health in Kampala in February 2014 (the report can be found here <http://www.c3health.org/wp-content/uploads/2009/09/Amalgamated-Uganda-report-FINAL-v-2-20140604.pdf>).



The workshop brought together nursing and medical experts, practicing nurses and health workers from Mulago and Butabika hospitals,

two of Uganda's three national referral hospitals specialising in physical and mental health respectively, and other local health facilities, peer support workers, representatives of the Danish NCD Alliance and a local journalist. There was a unique focus on the relationship between mental illness and physical health and the opportunities and skills required for health promotion and disease prevention particularly in terms of lifestyle changes. The main workshop was very well received and was followed in subsequent days by a series of smaller workshops and presentations in clinical practice settings. The inclusion of Butabika hospital was influenced by work already underway there by members of UDHF to improve mental health care, under the auspices of the East London NHS Foundation Trust with support from THET (Tropical Health and Education Trust). Following this workshop, a new programme was instituted to focus on improving the physical health of patients in Butabika, by East London NHS Foundation Trust.

Mubende, 2015

Building on the work in Kampala in 2014, and including the Uganda Nurses and Midwives Union (UNMU), C3 further developed the programme to better engage with local communities. The approach used was based on C3's previous experience of working with nurses in low-income countries where it was demonstrated that with technical support and relatively small amounts of funding, nurses and other health workers could make a significant impact by working with local communities. The aim was to co-design and pilot a project from which lessons would be learned and shared and which could, if successful, be rolled out in other settings and countries.

In January 2015, 25 key people, including nurses, health workers and community activists, were selected to participate in a training of trainers (ToT) workshop in Mubende, a town in central Uganda approximately 107 miles west of Kampala, chief town in Mubende district which has a population of about 660,000 people. The workshop included local experts who provided up to date information and evidence about addressing the risk factors for NCDs and supporting individuals and communities in adopting healthier behaviours. Participants initiated the development of action plans for small local projects which could be delivered and evaluated over a six-month period. A report of these workshops and associated activities is available here <http://www.c3health.org/wp-content/uploads/2015/04/Uganda-ToT-Report-final-20150324.pdf>

Based on participant input at the Mubende workshop, two pilot projects, *Preventing NCDs and Promoting Health through Community Dialogue and Engagement* and *Healthy Mothers: Healthy Babies*, were developed. Project plans, data collection, monitoring and evaluation tools were developed by C3 in collaboration with UNCDF and it was agreed that the local implementation would begin in April 2015 with initial funding of £6,000 from C3 on signing of the Agreement and a further £4,000 on successful completion of the project. However, shortly after the Agreement was signed there were sudden and significant changes of personnel at UNCDF, including a new CEO and Chair of the Board. The projects were delayed and subsequently adapted versions were implemented in late 2015 and early 2016.

The agreed *Community Dialogue and Engagement* project was to involve four local teams led mainly by people who had attended the ToT and including nurses, village health teams, local councillors, mobilisers and community workers and others, supported by local health experts. Each team was to organise and facilitate a local community dialogue at the beginning and at the end of the project and ensure that agreed

actions and follow up were carried out and monitoring and evaluation data collected. Community dialogue was described as a process which involves meeting with as many people as possible in a specific geographical community, sharing information and experiences related to the risk factors for NCDs (diet, physical activity, alcohol and use of tobacco) and working with them on local and individual responses. The dialogues were to provide an opportunity for local health experts to educate and inform people; challenge local myths and harmful traditions; offer health risk assessments with appropriate advice and referral; act as a stimulus to the community to consider what they could do locally within their existing resources but with the support and advice of the project team to address the risk factors. It was envisaged that the project team would work with the communities to deliver on three objectives:

- 1) encourage and support healthy behaviours with regard to diet, physical activity, use of alcohol and smoking cessation;
- 2) identify local assets i.e. local experts, facilities, equipment, resources etc. that are available or could be mobilised to help the community;
- 3) agree responses and solutions for individuals, groups and the local community in general, which are achievable within their existing resources or with a small agreed amount of additional funding allocated by UNCDA.

The adapted *Community Dialogue and Engagement* focused specifically on the first objective and provided information, discussion, health education, screening and testing of NCD related knowledge and understanding of 575 people. It should be noted that not all participants were included in every section of knowledge and screening as people came and went at different times during the dialogue process. Analysis of the data showed that there was a significant improvement in participant's knowledge about NCD prevention between pre-test and post-test. Of those screened 22 per cent had a BMI indicating overweight or obesity; 34 per cent had raised blood pressure; 13 per cent had high random blood sugar; fewer than 30 per cent ate the recommended five portions of fruit and vegetables per day; 20 per cent did not meet physical activity guidelines of 30 minutes moderate level daily; 90 per cent had never used or had stopped using tobacco; and 22 per cent were at moderate to high risk because of their alcohol intake. Some 60 per cent of participants committed to changing their lifestyles in order to address the risk factors and many said they would share the information with others, particularly in relation to the dangers of tobacco use and the different ways it can affect their families. Of 115 respondents 57 per cent said that they or their family members suffered from one or more NCDs.

The *Healthy Mothers: Healthy Babies* intervention aimed at enabling midwives to make home visits to about 30 pregnant women from 12-40 weeks gestation who fail to attend routine antenatal clinic appointments. The intervention was amended by UNCDA following discussion with the Uganda Ministry of Health NCD desk officials, to focus on pregnant women who were identified as being at risk, as evidenced by a variety of indicators such as hypertension, gestational diabetes, pre-existing diabetes, obesity and active or passive smoking. Of 34 women identified, 25 received on average two follow-up home visits; four were screened again and found to have normal parameters; and five could not be traced. At time of report 24 of these women have had safe delivery of normal babies and are reported to be doing well. Feedback from the midwives and expectant mothers indicates that this intervention helped create a positive relationship between them and made a positive link between the mothers and the health facility services. The midwives realised their vital role in health promotion and the importance of integrating healthy lifestyles and NCD prevention into their antenatal care and other health activities. Challenges faced in implementing this intervention included the lack of basic equipment such as blood pressure monitors that could be used in outreach visits to women's homes; problems tracing women due to poor roads and lack of telecommunications; the delayed start to the project meant that some of the original ToT volunteers were either engaged elsewhere or had lost interest; the lack of educational and information materials that would be intelligible to illiterate women; and the difficulty women experienced in communicating the health risks of smoking to their spouses given 'men's busy schedules'.

Kira, Kampala, 2015



Because of the keen interest generated by the 2014 workshop in Kampala, a workshop was also delivered in Kira, a suburb of Kampala, in January 2015. Our original intention was to offer the workshop to about 25 participants, however over 30 participated and over 100 would have liked to have been invited to attend, confirming the high level of interest in this topic. The workshop focused on physical activity as an important component of physical and mental health and was very well received. It was reported on during a peak time television news programme and in local newspapers and included interviews with Pat Hughes from C3 and Constance Keikembo, CEO of UNCDA, thus reaching many tens of thousands of people.

The workshop was followed by a football match between senior and junior teams from Kira Young, a championship team, some of whose members are part of the Uganda national squad and who were keen to promote physical activity. This was a very popular event attended by hundreds of people. About 60 spectators took

the opportunity for health screening. Prior to and throughout the match there was an ongoing commentary about NCD prevention and promotion of physical and mental health. Diaspora colleagues have been involved in further work with local authorities and football teams who are very keen to promote the links between physical activity and health. A report of the event can be found <http://www.c3health.org/wp-content/uploads/2015/04/Uganda-ToT-Report-final-20150324.pdf>

Advocacy meetings, Kampala 2015

As part of the wider strategy to help realise the nursing contribution to NCD prevention and the links between physical and mental health, and to contextualise approaches to prevention, facilitated by UDHG colleagues, C3 held a series of meetings with key personnel. C3 was positively and graciously received and encouraged to continue in our efforts to support and promote the health of the people of Uganda. C3 was welcomed to the UNMU offices by President Janet Obuni and honorary treasurer Atim Lucy Joyce. A member of staff described in very passionate terms the work of their ICN Wellness Centre, which provides health education, screening, care and management for health workers and their families and the opportunities that exist to expand their focus to NCD prevention. We met with Odeke Catherine Betty, Assistant Commissioner Health Services, Nursing and colleagues at the Ministry of Health and with Dr Rose Chalo Mabirye, Head of Nursing Department at Makerere University and member of the Uganda Nursing Council.

‘My heart always rejoices when I meet a person who is so passionate on seeing better health in the people and more so the people of Uganda whom I deal with day to day. The fire blaze now seems to be the NCDs which young and mid class people are acquiring through ‘modern’ habits (lifestyle). Prevention of NCDs is indeed very possible. It may take a bit of time for the prevention methods to be understood but slowly with determination and consistency, it will be achieved and appreciated.’
(Follow up email from Ministry of Health)

UK-Ugandan Conventions

C3 supported the UDHF to participate in the annual Ugandan UK Trade and Investment Conventions in London in September 2014 and 2015, which attract participants from across the country who have particular interest in keeping up to date with developments in Uganda, including private and public sector organisations and charities, as well as representatives of the Ugandan government and high-ranking officials. Each event was attended by around 1,000 people, and provided an opportunity to raise awareness and offer health screening and advice to the UK based Ugandan community. This was a valuable opportunity given disparities in health and well-being and often poor take up of services by many in black and minority ethnic groups and in light of the stigma associated with diseases such as cancer and mental illness. Our joint stand with UDHF attracted a constant stream of people interested in talking about NCDs and mental health. Of the 60 participants who took up the offer of having their blood pressure checked, including the President of the World Medical Association, 80 per cent had raised or high blood pressure and were given appropriate advice.



Working with other diaspora groups

C3 regularly includes members of many other diaspora groups in invitations to events such as the C3 International Breakfast Seminars. As well as working with the Ugandan diaspora C3 has engaged with other diaspora groups and individuals including the Africa Health Policy Network, the East African Health Forum, the Zambia UK Health Alliance and contributed to a number of events, for example:

- In March 2014, following the Commonwealth Nurses Federation conference in London, C3 brought together nurse leaders from Jamaica and Uganda and their UK-based diaspora colleagues for a one-day workshop to strengthen their links, learn from each other and develop action plans and initiatives on NCD prevention between the UK and the home countries. Participants included the President and one of the founders of the Jamaican Nurses Association of the UK; the President and three Executive members of the Nurses Association of Jamaica; the Commissioner for Nursing, Ministry of Health, Uganda; the Director, Uganda-UK Alliance; a representative of the Tropical Health Education Trust; and members of UDHF.



- C3 participated in the re-launch of the UK Sierra Leone Health Partnership in March 2014, attended by about 100 participants from a variety of organisations, including diaspora groups, who focused on strengthening and building prevention into the health system. Sadly, the outbreak of Ebola changed the focus and priorities and inevitably NCD prevention slipped down the agenda. However, in March 2016 the president of the national nurses association in Sierra Leone asked if C3 might work with them and support them in raising awareness of NCDs. They believe that the timing is opportune given the international focus on strengthening the health system in their country and C3 is currently in discussion with Comic Relief about potential programmes and funding.

- C3 is in contact with a small number of Zimbabwean diaspora who are keen to emulate the partnership we have with the Uganda Diaspora Health Foundation. C3 provided educational materials to be used by a member of the Zimbabwean diaspora in a workshop for community health workers in Harare in January 2016, alongside her project which was part of her Florence Nightingale travel scholarship.
- C3 participated in an event to mark International Nurses Day at the Portuguese Embassy in May 2014 and enabled the small Portuguese diaspora group of about six nurses, to offer a PopUp Blood Pressure Clinic and health screening at a Portuguese focused event in Watford in June 2014, which was taken up by over 40 people.

C3 believes that, despite the inevitable challenges, there are tremendous opportunities to work with diaspora nurses to inform, educate and support BME communities in the UK in NCD prevention, as these communities are known to be at particular risk, and also to work in partnership with these nurses to enable to better contribute to NCD prevention in their home countries.

3) International engagement

C3's original proposal to the Burdett Trust highlighted the importance of engaging with nurses from across the world in promoting health and preventing NCDs. C3 aimed to build on existing strong networks and contacts; convene a meeting of key international nurse leaders; and develop a sustainable global online network to share information and experiences and support nurses in promoting health in their countries and communities. As we shaped the development of this work it became clear that a more effective and sustainable approach would be to tap into and influence existing groups and networks and work with them to engage nurses more fully in the prevention agenda.

The Burdett funding enabled C3 to engage successfully with nursing audiences from across the globe with the aim of highlighting the increasing epidemic of NCDs and the potential contribution and opportunities for nurses to help prevent them. C3 estimates that in the course of our three-year partnership with the Burdett Trust, in response to invitations and opportunities, we have addressed directly approximately 3,000 nurses and others, at least half of whom are at senior level in national and international organisations, and therefore our reach and influence in engaging nurses can be multiplied significantly. Examples include:

- Presentation to government chief nurses, presidents and CEOs of national nurses' associations from across the world at the WHO Global Advisory Group on Nursing, Geneva, 2013.
- As a result of our participation in an invited workshop prior to the ICN Congress in Melbourne (2013), C3 was invited to make a presentation at the inaugural Global Nursing Leadership Forum in New York in 2014, involving 30 cardiovascular specialist nurses from 10 different countries.
- Meeting with the CEO and Global Business Development Director of Sigma Theta Tau International, the largest nursing honour society in the world with over 130,000 members working to influence health care decisions locally, regionally and globally, Prague, 2013.
- Represented the Commonwealth Nurses and Midwives Federation at various Commonwealth meetings in London, including contributing the nursing and health focus to a 3-day meeting of civil society in preparation for the Heads of Government meeting in Sri Lanka in November 2013. (The CEO is based in Australia and is not always able to attend London-based events, which require a strong voice for nursing and health.)
- Meeting with the president and CEO of the American Organisation of Nursing Executives, a subsidiary of the American Hospitals Association, at their 4th Annual Nursing Leadership Event in Croatia (2014) which involved around 100 representatives of national nurses associations (NNAs) from Croatia, Montenegro and Macedonia. Apart from strengthening links with European NNAs the main purpose of the meeting was to stimulate their interest in the NCD prevention agenda as it relates to nurses' health and wellbeing and productivity in the workplace.
- Keynote presentation and a seminar focused on nurses' health, which featured a presentation about the Healthier Nursing Students project, at the Commonwealth Nurses and Midwives Federation

conference in London (2014), which was attended by over 200 senior nurses including presidents and CEOs of NNAs from 26 countries.

- Poster presentation to over 300 participants, mainly nursing academics, educationalists and researchers, from 10 countries at the 25th International Networking Education in Healthcare Conference (Cambridge, 2014).
- Participated in the first ever EU Summit on Chronic Disease in Brussels (2014).
- Presentation to 213 senior nurse leaders and global health policy makers from 14 countries, at the Nursing Leadership in Global Health Conference at Vanderbilt University, Nashville, US (2015)
- Plenary presentation to some 500 participants at the ICN Congress, Seoul (2015), including global nursing leaders, senior nurses from all fields of nursing, policy makers, government officials, WHO representatives and others. (See picture to the right)
- In collaboration with The Wellbeing People, C3 offered an interactive health kiosk, which provided individual printouts of health status for participants from 29 countries at the Commonwealth Nurses and Midwives Federation conference in London, March 2016 (see Box 1).



The interactive health MOT kiosk was used by 44 conference participants. Of these:

- 60 per cent of men and 33 per cent of women had raised blood pressure
- 64 per cent men and 54 per cent of women were overweight or obese
- 64 per cent men and 62 per cent of women had raised body fat content

Having a print out of their own vital signs and the opportunity to discuss some of the implications empowers individuals to act on improving their own wellbeing.

Box 1

- C3 has been invited to make a presentation on the threat to health security of NCDs, to the 2016 Commonwealth Civil Society Forum in May, in conjunction with the annual Commonwealth Health Ministers' meeting in Geneva on the eve of the World Health Assembly, and to participate in the Global Advisory Panel on the Future of Nursing and Midwifery (GAPFON) European Regional meeting in Amsterdam, 1-2 June 2016.

4) Sharing information and resources

Rather than establishing a new online network and developing a resource kit as originally envisaged to enhance the nursing contribution to prevention globally, we identified and contributed to existing online networks for sharing information and resources, engaged in online discussions, expert panels and webinars, increased our use of social media and participated in one twitter-chat related to nurses' health and role modelling.

Among the online networks that C3 contributed to are:

- HIFA 2015 (Health Information for All by 2015), whose vision is 'A world where every person and every health worker will have access to the healthcare information they need to protect their own health and the health of others' and which brings together more than 15,000 health researchers, publishers, librarians, policymakers, clinicians and information professionals on 5 forums in 3 languages;

- Global Health Delivery online, an online collaboration platform for global health professionals to connect and exchange insights about their work, which hosts 13,000 members representing more than 5,400 organisations in 182 countries; and the
- Global Alliance for Nursing and Midwifery (GANM) which supports a multitude of online communities of practice that cover health and development topics aiming to build the capacity of nurses and midwives to improve the health of communities across the lifespan.

C3 increasingly uses social media to engage with and inform nurses and others. C3 established a twitter account, @C3Nursing, to enhance communication about the nursing contribution to NCD prevention, which now has over 620 followers. This complements our primary twitter account, @C3health, which tweets an average of 138 tweets per month to its 3,464 followers, earning an average of 66,505 monthly impressions. C3's director, Christine Hancock, has 1,749 LinkedIn connections, many within the nursing field, with whom she shares regular updates.

Funding from the Burdett Trust enabled C3 to participate in the ENS4Care Thematic Network, an EU project led by the European Federation of Nurses Associations to share good nursing and social work practices in eHealth services (telehealth and telecare) and – through the evaluation and consensus building – to create a set of guidelines focusing on five areas; healthy lifestyle and prevention; early intervention and clinical practice in integrated care; skills development for advanced roles; and nurse ePrescribing. C3 led, and was responsible for the development of the guidelines related to healthy lifestyle and prevention. The work was commended by the EU Commission and launched at the EU Parliament. <http://www.ens4care.eu/>

C3 hosts a series of International Breakfast Seminars covering a range of topics on innovative approaches to preventing chronic disease and promoting healthy living. Seminars feature expert keynote speakers from its international network; highlight global work that will interest and inform UK professionals; and are hopefully also beneficial for international professionals who will enjoy presenting to a London audience. Reports of all seminars are available on the C3 website, examples include:

- C3 took the opportunity of Dr Stephanie Ferguson's attendance at the Burdett symposium at Bafta in February 2015, to invite her to present a seminar on how faith-based organisations can contribute to NCD prevention. Stephanie is director of the ICN-Burdett Global Nursing Leadership Institute in Geneva, Switzerland. (See picture to the right)



- In March 2014, Dr Lara Fairall, founder of the Knowledge Translation Unit at the University of Cape Town Lung Institute, South Africa, gave a seminar on the Practical Approach to Care Kit (PACK), developed over 12 years in South Africa and including symptom, evidence and policy-based guidelines and training and of particular significance for nurses.
- In August 2013, Constance Kekihembo, CEO of the Uganda NCD Alliance, spoke on Taking the lead on NCDs in Uganda.

Capacity building and contribution of C3

The three years of funding from the Burdett Trust has had a massive impact in enabling C3 to engage nurses in NCD prevention, while raising our profile and expanding our reach. It also increased our capacity to explore other funding opportunities and partnerships.

Building on our successful partnership with LSBU, the evidence from the intervention study which indicated that motivation of nurses to change their behaviour comes from a view that they should ‘practice what they preach’, and an increasing interest in nurses’ health generated by the study, we were awarded an innovation grant by the Health Innovation Network, South London, to raise awareness of personal health and wellbeing in the NHS workforce using a social marketing campaign. The campaign will run in three NHS Trusts in London, from April – September 2016.



C3’s director has been invited to sit on the NHS Healthy Workforce Advisory Board.

C3 has also collaborated with the International Council of Nurses in response to a call from Global Bridges, funded by Pfizer, on a proposal to create and mobilise a European network of nurses and nursing organisations to advance evidence-based tobacco-dependence treatment and advocate for effective tobacco-control policy; and to provide information and advice to nurses on the treatment of tobacco-dependent patients and policies and practices to facilitate people’s decisions to stop using tobacco. Achievement of this goal will increase the capacity of healthcare professionals across the European region and help in the fulfilment of C3’s mission to reduce the incidence of non-communicable disease through stopping tobacco use. We were successful in getting through the first round of the selection process and have subsequently submitted a full proposal, the outcome of which will be announced in June 2016.

As a result of C3’s international nursing expertise, highlighted by our diaspora project with Uganda, we were invited by Nottingham Trent University to contribute to a successful proposal aimed at building capacity of Community Health Workers in Uganda, with C3 acting as an advisor to the project.

Our intervention study with nursing students has proved particularly timely as NHS England announced a major initiative in March 2016 to improve the health of NHS staff, and has helped focus attention on the importance of nurses’ health. This could open a whole new body of work, including the Healthy Weight Initiative for Nurses in collaboration with the RCN and LSBU, funded jointly by the Burdett Trust and the RCN.

Funding from Burdett has enabled us to attend and contribute to various All Party Parliamentary Group (APPG) discussions and events particularly those related to global health including:

- Africa APPG and APPG Global Health – Improving health at home and abroad (2013)
- Africa APPG and APPG Global Health – All the talents (2013)
- Africa APPG and APPG Global Health – Ebolanomics (2015)
- APPG Global Health – The UK’s contribution to health globally (2015)
- APPG Global Health – UK health aid and global health (2015)
- APPG Global Health – The future development of nursing globally – call for input (2016)

C3 has also presented at local and national events including a keynote presentation to the annual Queen’s Nursing Institute Conference, London, 2015.

C3, in partnership with New Media Networks, was selected to participate in a Commonwealth Games Creative Studio in Glasgow, organised by the BBC as part of a programme of innovation and collaboration across the BBC and the digital sector, to generate ideas that engage as many people as possible in BBC output during the Commonwealth games in August 2014. We made one of 33 two minute pitches prepared and presented on the day and while the audience really liked it and its focus on day to day lives of nurses across the Commonwealth, we were not included in the final selection.

Evaluation

The Burdett Trust can be confident that, despite the challenges associated with evaluating this type of work, C3 has made every effort to monitor, evaluate, learn from and disseminate the various aspects of the three-year programme.

Quarterly monitoring meetings took place with the lead researcher and the research assistant responsible for the intervention study with nursing students. Two interim reports and the final report were delivered on time, to a high standard. The study has generated significant interest, including among nursing academics from various countries, and the outcomes are being disseminated as highlighted earlier. The topic is even more timely and significant than we had originally envisaged, particularly in the UK, as increasing attention is being focused on the health of the health workforce and workplace health generally and as a result the study recommendations and implications may have an even greater impact and salience for policymakers and others than might otherwise have been the case. The well-publicised study, and the wider research associated with it, provide an evidence based foundation for improving the health of nurses and their contribution to health education and health promotion with patients and the public.

Various elements of the diaspora project required differing approaches to evaluation. Our engagement with the Uganda diaspora has resulted in the development and implementation of a useful programme of activities especially in Uganda and to some extent in the UK. The relationships made with the various stakeholders and organisations and the ways of working that were developed, have been very positive and supportive throughout the period of the project and have resulted in requests from countries including Zimbabwe, Sierra Leone and Ghana, asking that we consider doing similar work with them.

Each of the workshops and training activities we engaged in directly, or facilitated in Uganda, have been very popular as evidenced by written and oral evaluations, confirming an increase in participants' awareness and knowledge about NCD prevention and verbal commitments to personal behaviour change. However, C3 acknowledges that there can be a gap between a verbal commitment to change and achieving an actual, sustained change in behaviour. Unfortunately, the pilot Community Dialogue and Engagement Project which included such an evaluation, was amended due to changes in local circumstances, rendering the longer term follow-up as originally envisaged impossible at this time.

As a result of the diaspora project, over 900 people took the opportunity to undergo health screening and receive lifestyle advice, mainly in Uganda. This will have resulted in an increased awareness and understanding of their own health, although it is not possible to confirm that participants followed through on the advice given. The decision to offer health screening in Uganda was taken after much discussion and careful consideration, especially by colleagues living in Uganda – C3 was concerned initially about the implications of offering health screening if follow-up facilities and resources were not available. The stance taken by colleagues in Uganda was that individuals had the right to know their health status and the better informed they were the more likely they would be seek improvements in their local health facilities.

C3 is grateful to colleagues at UDHF and UNCDA for their contribution to this work and acknowledge the difficulties faced by the new team at UNCDA in seeking to implement the pilot projects as originally agreed. We still believe the proposed model is promising and should if possible be trialled elsewhere, taking account of the important lessons learned. These include the importance of personal relationships and full engagement of all members of the core project team throughout the project; the need to strike an appropriate balance between the amount and type of data required for a robust and insightful evaluation and the pressing needs, priorities and limited resources on the ground; ensuring that the project plan is realistic and deliverable with the available resources and in a timely manner; and ensuring that local volunteers and others are well briefed and prepared and that the materials used are appropriate for the audience/participants especially where there are issues related to language or literacy.

A simple evaluation of our success in raising awareness among the global nursing community is reflected in the increasing numbers of high-level invitations to share knowledge and experience to which the Burdett funding enabled us to respond, directly reaching an estimated audience of around 3,000 and the increasing numbers with whom we engage on social media.

Financial report

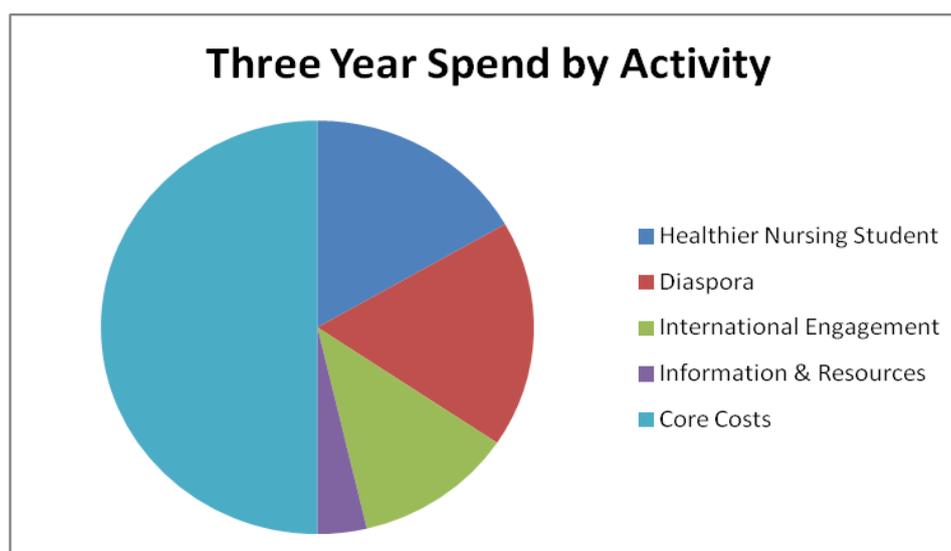
C3 received a total grant of £300k from Burdett in tranches of £100k per year over a total three year period. As outlined in the main body of the report the funds were utilised to undertake a comprehensive program of activities focusing on four key areas and to contribute to the core costs of developing and delivering the C3 nursing programme. The four project areas are:

- Healthier Nursing Students
- Diaspora
- International engagement
- Sharing information and resources

The table and chart below show how the funding received was utilised across the various projects.

	YEAR 1	YEAR 2	YEAR 3	TOTAL
Healthier Nursing Student	34,500	11,756	3,744	50,000
Diaspora	13,954	24,295	15,096	53,345
International Engagement	11,184	5,489	19,004	35,677
Information & Resources	3,300	3,189	4,489	10,978
Core Costs	34,710	55,000	60,290	150,000
	97,648	99,729	102,623	300,000

Note final payments relating to the project will be paid by the end of April 2016, these figures are accounted for in the numbers above.



The funding received was used to cover the costs of the co-development, implementation, monitoring, evaluation and dissemination of the various projects and includes an allocation of £40k to LSBU for the Healthier Nursing Student project and £6k paid to the Uganda NCD Alliance in support of the in-country projects. Also included in the individual projects are costs related to travel, accommodation, conference and convention fees.

Conclusion

Funding from the Burdett Trust, and its partnership with C3, has had a significant impact as well as an advocacy and leadership role in informing and engaging some of the world's 19 million nurses in preventing NCDs, a global threat not only to human health but also to development and economic growth. Over the course of this three-year programme C3 has engaged directly and indirectly with many thousands of nurses worldwide, including many high-level national and international nurse leaders and opinion makers, helping to inform, educate, encourage and motivate them to recognise and maximise the potential and capacity of nurses in NCD prevention.

The intervention study with nursing students has proved especially timely as the issue of nurses own health, particularly concerns about levels of overweight and obesity, is coming increasingly into the spotlight in the UK, and there is increased focus on the health of the NHS workforce. The study contributes to the evidence base for action and its findings and conclusions can be used to inform policymakers, employers, educators, regulatory bodies and others. It highlights the importance of further exploration of the impact of nurses' health on their patients and their professional practice in the light of calls for all health practitioners to promote health.

The opportunity to work with nurses from other countries, currently working in the UK, and to enable them to support their local communities here and in their home countries has been particularly rewarding. Partnering with the UDHF and UNDA has helped put NCD prevention on the agenda among nurses, health workers and local communities in Uganda and enabled us to highlight the importance of prevention and the potential contribution of nurses with senior policymakers, academics and others. The approach used to work with the Uganda diaspora could serve as a model for use with other countries. C3 has already been approached by colleagues from Zimbabwe, Sierra Leone and Ghana requesting a similar sort of partnership.

Being able to engage actively with the global nursing community has been a particular strength and benefit of the programme, promoting partnerships and shared learning. This has been a remarkable asset at a time when the global challenge of NCDs and the vital importance of prevention is being realised very slowly, and the potential contribution of nurses not yet generally recognised or enabled.

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