# *REPORT ON THE EVALUATION OF*

# *THE GLOBAL HEALTH EXCHANGE FELLOWSHIP PROGRAMME*

# *- THE PILOT PERIOD.*

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*"The skills I have gained in this programme, such life skills, they are not taught in any academic class. There is much we learn in class, but seeing and experiencing the practical side of it, make learning sink deep into the brain. This project has helped me appreciate problems, get a feel and meaning of social deprivation in a developed country and a developing country which I do not think I would ever appreciate better if I read it from a book.*

*It has also broadened my understanding that no health system is fully self-sufficient. This kind of learning, real world learning, not imaginations.*

*It is easy to say how to bring people together, how to work with communities, how to pool resources just as it is told in the books. When one has actually to do it is when one realises why that, which sounded simple, does not happen in a day".*

*(GHEFP fellow, March 2016)*

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# Introduction

Health is a Human Right but there are still significant health issues in all parts of the world. All over the world people live with significant health issues related to e.g. teenage pregnancies, safeguarding children, violence, malnutrition, and HIV (Battat et al., 2010; Bozorgmehr, 2010; Frenk et al., 2014; Janes and Corbett, 2009; Koplan et al., 2009; Rowson et al., 2012).

*Global health* is, however, not just health in a foreign country, and it is not just a low-income country problem. Global health is worldwide health issues. Global health is more than communicable diseases and campaigns, and it can be distinguished from international and public health in that it focuses on issues that directly or indirectly affect health that has transcended national boundaries (Koplan et al., 2009). It embraces both prevention in populations and clinical care of individuals, as well as a high level of local inclusion in education, training and initiatives that will comply with local community structures, customs and beliefs. Therefore, development and implementation of solutions to global health issues require the global cooperation of interdisciplinary or multidisciplinary teams within and beyond health sciences (Koplan et al., 2009).

According to Frenk (Frenk and Moon, 2013; Frenk et al., 2014), there is also an important political dimension if health is seen as an issue of global solidarity where there is interdependence between members of the global society with shared responsibilities and resources based on universal human rights and duties. With this perspective on global health, there are clear advantages to a National Health Service in having health professionals that have acquired expertise while working abroad, enabling them to maintain a functional perspective to potential global threats (Frenk, 2010).

The intention of the *Health Education East Midlands' Global Health Exchange Fellowship Programme* was that the UK and Kenyan fellows could be exposed to community health in different cultures. Some of these cultures are traditionally narrative based and influenced cultures, where 'Western' solutions may be resisted and unsustainable, others rely on

evidence-based medicine, where narratives are not valued as highly as the written and well-researched guideline. The fellows were expected with their different medical, and cultural expectations to be able to highlight for each other what they in their normal clinical working day take for granted in their home culture, and learn from each other *because of* these medical, cultural differences.
The personal and close involvement with a community in need was furthermore expected to offer development of personal maturity, team working and transferable trans-cultural problem-solving skills as well as an in-depth understanding and compassion with communities in need.

This report communicates the evaluation of The Health Education East Midlands' Global Health Exchange Fellowship Programme, in its pilot period from April 2015 to May 2016, the Fellows' placements being in the six-month period between September 2015 and March 2016.
The report includes an executive summary; a short description of the programme in relation to its theoretical platform; and a description of the initially expected outcomes of the programme. The evaluation part includes a description of the evaluation methods; the results of the evaluation regarding the process, outcomes, empowerment and added value; and a discussion of the results of the evaluation as well as some recommendations for running programmes like the Global health Exchange Fellowship Programme. Detailed information about recruitment of the fellows, the budget, etc. is described below and detailed in the attached appendices.
Apart from the people heading the direct and indirect funding organisations, and the people responsible for the running of the programme, all person- or geographically identifiable details have been changed to allow anonymity in the participation of the project. [….] indicates that a person name or geographical site has been edited for this reason. For illustrations, I have used quotes from all the data that has been available for me. Quotes will be in italics, and indented. ... means that some (irrelevant) text has been deleted for clarity, and (…) indicates editing in the original data for clarification.

The programme was funded by Health Education East Midlands, secured by Professor Sheona MacLeod, Postgraduate Dean for Health Education East Midlands, UK. The

programme was done in collaboration with UK and Kenyan health and higher educational institutions. The project leads were the author of this report, Dr Charlotte Tulinius, Associate Professor of Postgraduate Education in General Practice, The Research Unit for General Practice, University of Copenhagen, Denmark and senior member at St. Edmund's College, Cambridge, UK; Professor Arthur Hibble, Anglia Ruskin University, and senior member Hughes' Hall, University of Cambridge, UK; and Dr Prit Chahal, Associate Postgraduate Dean, Health Education East Midlands, UK.

It would not have been possible to pilot this programme without the support from a lot of people and institutions in the UK and Kenya. Apart from the already mentioned, I would like to give special thanks to

- Dr Patrick Chege, Department of Family Medicine, Moi University, Eldoret, Kenya for arranging all the recruitment interviews for the Kenyan fellows;

- Dr Maxwell Lodenyo, Machakos County, Kenya and Mr Michael Machaka Nderitu, Nazareth Mission Hospital, Kenya for granting their employees a six months study leave while participating in the programme as the two Kenyan fellows;

- Dr Helen Mead, GP Dean, Health Education East Midlands, UK, and Professor John Howard, GP Dean, health Education East of England, UK both granting one of their GP trainees a six months study leave to become the UK fellows of this programme;

- The Master and the Bursar at Hughes Hall, Cambridge University, the UK for holding the budget.

Finally, a very warm thank you to the people and the leaders of the two communities in Kenya and the UK. Without your warm welcome to all of us, without your engagement, support and help there would have been absolutely nothing to write about in this report.

*Charlotte Tulinius,*

*Cambridge May 1st, 2016*

# Executive summary

This report evaluates the pilot period of the Global Health Exchange Fellowship Programme (GHEFP) that took place from September 2015 until March 2016 with preparations of the programme starting in November 2014.

The GHEFP aimed to allow experiential learning in relation to global health for health professionals and was set up as a UK-Kenya exchange project with a focus on global health issues in local contexts. The four UK and Kenyan health care professionals of this pilot programme worked together as a team during the entire programme, were supervised by the project leads and local professionals, utilising existing community resources and expertise. The fellows worked the first two months in a poor, rural and socially deprived community in Kenya, and subsequently two months in a poor, inner-city socially deprived area in the UK. The duration of the programme was six months in total including preparation, follow-up and reporting. The programme was supported by an adapted model of empowerment evaluation. The programme aimed to support the professional development of the fellows. It also aimed to support the sustainable development of the health in the two local communities in which the fellows were working.

The theoretical frame of reference for the programme became a triangulation between Sen's Capability Approach (Sen, 1997), and Koplan's definition of Global health as dependent on wider social determinants (Koplan et al., 2009) with the methodological approach of Needs Assessment (Sleezer et al., 2014) in relation to health, and focusing on a qualitative research approach.

The evaluation methods used were qualitative research methods including in-depth interviews, short open-ended survey questionnaires, diaries, reflective notes, and photos. To allow the evaluation to be process oriented and dynamically responsive to the developing needs, there were regular planned as well as ad hoc evaluation meetings. The dynamic process was also supported by Skype meetings and a Whatsapp group including all fellows, project leads and supervisors.

The basic evaluation questions were:

1. Has a needs analysis model been used, with the fellows working with the local health teams, including stakeholders of the community, developing the fellows' global health related problem-solving skills?

2. Have the fellows managed to develop professional international partnerships and the production of some kind of academic output?

3. Have the fellows succeeded in carrying out a health needs analysis leading to the identification of global health issues in both communities, acknowledging the individual's needs as well as the population's needs

4. Have the fellows succeeded in suggesting sustainable and locally resourced solutions to the identified global health issue?

5. Have the practical circumstances been optimal with good and supporting recruitment, sufficient correspondence and preparation for the programme with appropriate practical and academic support, to enable the described and derived outcomes, the fellows' learning throughout the programme, and ensuring the integration of stakeholders, culture and other contexts important to the programme's success.

The evaluation is in two parts, the basic evaluation, answering the basic evaluation questions stated above, and the evaluation in the perspective of an adapted model of empowerment evaluation.

The basic evaluation of the content outcomes is clear: The pilot programme was a success. Even though only two of the fellows had the entire Kenyan induction programme, and one of the fellows started six weeks into the programme, all fellows achieved the professional progress the programme aimed for. Furthermore, the two communities that the fellows worked with were left with a new understanding of their global health issues, and some possible ways forward.

There are however important learning points from the basic evaluation of the practical and logistic implementation of the GHEFP. In this pilot, the fellows had previous relevant and related experiences with the work they were going to do in the programme, but none of them had experiences of working in the way this programme demanded. The flexibility and work of the educational supervisors and the possibility for the project leads and supervisors to set up teaching sessions on demand were crucial for the fellows' development in the programme. All fellows had some training in delivering academic work, but they needed substantial support e.g. training of data collection and analysis methodology, support to write up reports on their findings in the communities, training in presentation skills and supervision in the construction of papers for academic journals. It was important for the fellows to establish and maintain a solid collaboration not just with the community leaders, but also with the locally responsible health authorities. The fellows did part of this work, but the project leaders and the supervisors were needed to make the arena of the community available for the fellows from before the programme started and supported the fellows in this work throughout the duration of the programme. In some periods of the pilot project, the budget responsible project lead was needed on a daily basis to support the financial challenges met by the fellows, and problem-solving in relation to practical issues with accommodation, transport, VISA requirements, formal letters to employers, etc.

A major challenge in the fellows' work was working closely together in a group across differences in culture, traditions and faith as health professionals.
Despite this challenge, the fellows managed to engage in the application of the ten principles of empowerment evaluation to their development within the programme. They also transferred the principles from their own development within the team and applied all ten principles of empowerment evaluation to the work they were doing in the communities. Hence, two processes of empowerment took place; the fellows' process of empowerment and the communities' process of empowerment. The fellows of the GHEFP went through a process of empowerment gaining a broader understanding of global health, global health-related problem-solving skills, and developing international professional partnerships. They all saw the understanding and skills they developed as applicable to the work they will be doing as health professionals in their home countries. At the end of the programme they

presented their work in oral presentations to the stakeholders of the communities and the funders, and they started the production of academic papers to describe their learning from participating in the programme.
In both communities the fellows worked with responsible local health professionals, using a health needs analysis model. Together with individuals and representative groups of the population in the community they identified and prioritised global health issues, finding sustainable and mainly locally resourced solutions to the identified health needs. The fellows left the communities with reports describing the work they had facilitated in the communities, allowing the communities and responsible health professionals and organisations to use the experiences and learning points of the fellows' and communities' work with the GHEFP.

Compared to other exchange programmes the GHEFP distinguishes itself by being a "true" exchange programme. Most often the exchange only represents doctors travelling one way, learning from health professional host organisations or individuals. In this programme the four fellows worked together as a team, learning from each other in their two home countries, facing the exact same global health professional challenges, and finding solutions together with the local health professionals, locally responsible health authorities and the individuals in the communities. Most other exchange programmes focus on the exchange fellow delivering health services in a 'different from home' setting, immediately benefitting the visited community with the number of health services provided, whereas long-term and sustainable solutions to existing health needs are not the aims for the exchange. The GHEFP aimed not just to allow the fellows development in their understanding and problem-solving skills in relation to global health. The programme also aimed to support the two socially deprived communities that the fellows were working with to create sustainable solutions to existing global health issues within the locally available resources.

Programmes like the GHEFP allow health-educational organisations to contribute significantly to the development of health professionals gaining global health-related problem-solving skills and insights that go beyond the programme's scope changing the way the participating health professionals deliver health care services on a day to day basis in their home health care setting. Programmes like the GHEFP also allow health professionals

to produce academic papers and presentations, sharing their insights with a wider audience and giving credit to the health organisation hosting them. It also empowers communities in the countries involved to get new perspectives on their global health issues, finding new solutions to real problems.

Although the UK plays a major role in health globally, the latest recommendations from The All-Party Parliamentary Group on Global Health encourage the NHS and other health bodies to continue their support for health care systems, finding new ways and solutions to achieve universal health coverage, health worker education and training globally. The recommendations also encourage Health Education England and the equivalents in the other UK countries to support international volunteering and the education and training of UK healthcare and development workers abroad (The All-Party Parliamentary Group on Global Health, 2015).

The evaluation of the GHEFP gives hope that it *is* possible to make true exchanges of health professionals, exchanges that lead to the empowerment of socially deprived communities to raise awareness and create community ownership of solutions for better health. The evaluation describes an example of the practical implementation of the recommendation by Crisp (Crisp, 2008; DH & DfiD, 2008) that it is possible to develop solutions to global health as a two-way communication between low, middle and high-income countries.

At the end of the GHEFP, all the fellows redefined their definition of global health. Inspired by one of their new definitions of global health I will conclude that the globe is a sphere we all share. No matter where we are on the globe, we can look to the centre, and we will look at the same centre. Even though we might see slightly different things, when we look at the centre of global health issues, they are the same world over, and we need to find solutions together.

The recommendations are based on the evaluation of the GHEFP and aiming at the successful implementation of true global health exchange programmes with the expectation of outcomes, similar to the GHEFP. The recommendations are *not* relating to the content of the health needs analysis performed by the fellows working with the two communities.

The recommendations are based on the experiences from the programme, either where the programme clearly benefitted from this recommendation, or where it was clear that the recommendation was not in place with the direct consequence of this. The recommendations also reflect suggestions given by the wider team at the end of the programme when asked if they had suggestions for future programmes like the GHEFP. If the latter the recommendation will be clearly marked by the sentence "It is suggested that…"

The recommendations for implementing similar true global health exchange programmes are of practical-logistic, educational and financial character:

*In advance preparation of the wider communities*

1. All potential collaborators within the wider communities should be invited to engage well in advance of the programme start. If academic or professional institutions are expected to engage, the project leads need to establish the contact and develop the programme in accordance with the wishes and needs of these collaborators, e.g. health and educational officials.

2. Before the programme is set up, it is important for the project leads to explore potential obstructions and challenges, exam dates, practical immigration issues, and the need for ethical consent to the programme.

3. Before the programme starts all appointed fellows should take part in a meeting, discussing the programme in details with the project leads to assure that all fellows have had the same information. It is important that all fellows have a common understanding of the possible benefits for their career, and in what way participation in the programme will be documented (certificates, recommendation letters, testimonials, academic papers, etc.).

*Logistics and practicalities*

4. It is important that all fellows are free from other professional duties from day 1 in the programme. All fellows should be able to attend all of the programme, including the entire induction programme before each of the placements. The consequence is that the timing of the programme needs to steer clear of exams or other academic or professional demands that should be possible to foresee by the home institutions. It is suggested that all the fellows are paid the same salary during the programme, and not relying on the individual institutions willingness to and ability to pay the individual fellow.

5. Accommodation for the fellows needs to be conducive to working. Insufficient internet access, lack of basic hygiene, inadequate diet is likely to cause distraction from the work with the communities. If logistically possible it is suggested to include the fellows in the choice of the accommodation to avoid the need for finding and changing accommodation halfway through the programme. For some of the fellows, it might also be necessary to ensure that they can attend church services and have time off from the programme to see family, friends and have private time.

*Teaching, facilitating, supervision and other kinds of support throughout the programme*

6. An empowerment model like the one that was used in the pilot programme is recommended if the aim is to empower individuals and communities to develop their capabilities, rather than delivering solutions to predetermined problems. It can allow the fellows to develop their skills, understanding and ways of working with global health issues through the work they do to empower the communities identifying their health needs, prioritising the needs, and finding possible solutions to these needs within the available resources.
   However, it sets high demands for the educational support. It is important that the programme has incorporated sufficient resources (personal, professional, financial

and time) for ad hoc facilitation of the group of fellows, teaching sessions on demand, and supervisors who are an integrate part of the programme.

7. There should be a comprehensive and structured induction programme immediately before the fellows enter each of the communities. This programme should give the fellows and all supervisors a comprehensive understanding of the programme content, process and expected output. It should introduce the fellows to the chosen community historically, geographically, and culturally in relation to selected specific health and gender issues. It should also introduce the theoretical and methodological approach to exploring health needs analysis, global health and poverty enabling the fellows to conduct the health needs analysis with relevant tools and theoretical background. The induction programme should prepare the fellows to work with the programme's empowerment model with leadership and teamwork and the possibility of ad hoc teaching sessions should be emphasised and encouraged. Particular attention should be paid to both theory and implementation training of group dynamics and conflict resolution. Using the fellows as experts on their home culture and health care systems should be emphasised by integrating the fellows as much as possible in delivering the induction programme.

8. The supervisors should be an intricate part of the programme. It has been suggested that all supervisors should be part of the true exchange throughout the programme, working with the fellows in both countries, to allow sufficient understanding of the nature and progress of the programme.

9. Is has also been suggested that the local collaborating health professionals who had worked very closely with the fellows in the community should be part of the true exchange, or that the true exchange is supporting a multi-professional team of doctors, clinical officers, nurses and other health professionals.

10. It is suggested that the fellows should be supported to understand and implement a distributed leadership model to minimise conflicts regarding roles and obligations in the group.

*Budget*

11. A “teaching, meetings and progress line” in the budget is recommended to allow the fellows to call for different types of meetings with the supervisors and the communities.

12. It was suggested that the budget should also be able to support small initiative line that would allow buying a first aid kit to kick start first aid training and delivery by the local health professionals or trained members of the community. This recommendation would, of course, go against the overall aim to find solutions that are sustainable and within the available resources in the community.

# The Global Health Exchange Fellowship Programme

The Global Health Exchange Fellowship Programme (**GHEFP**) aimed to allow experiential learning about global health for UK General Practice Trainees (**GP trainee**) and Family Doctors (**FD**) and other health professionals from Kenya, e.g. Clinical Officers (**CO**).

The GHEFP was set up as a UK-Kenya exchange project with a focus on global health issues in local contexts. The UK and Kenyan health care professionals worked together as a team during the entire programme, supervised by the project leads and local health professionals, utilising existing community resources and expertise. The fellows worked the first two months in a poor, rural and socially deprived community in Kenya, and subsequently two months in a poor, inner-city socially deprived area in the UK. In both settings the fellows were given an induction to essential issues and continuous educational support based on their occurring needs. The fellows focused their work on global health issues and the available local resources, as perceived by the population, and involving key local individuals in planning and developing possible sustainable solutions. The duration of the programme was six months in total including preparation, follow-up and reporting, and it was supported by an adapted model of empowerment evaluation. As the programme has never run before, this period was perceived as the pilot for future Global Health Exchange Fellowship Programmes.

The programme aimed to support the professional development of the fellows. It also aimed to support a sustainable development of the health in the two local communities in which the fellows were working.

### *The theoretical platform of the programme*

In the induction to any professional or educational programme the professional values and theoretical platform of the teachers will colour the content. All project leads/teachers

wanted the fellows to develop on their premises, support their empowerment in the direction most valuable to the individual fellow. Although not identical for all teachers/project leads, their perceptions of global health decided the initial presentations and teaching sessions. Looking back, the theoretical frame of reference for the programme became a triangulation between Sen's Capability Approach (Sen, 1997), and Koplan's definition of Global health as dependent on wider social determinants (Koplan et al., 2009) with the methodological approach of Needs Assessment (Sleezer et al., 2014) in relation to health, and focusing on a qualitative research approach.

**Capability approach**

An important factor in global health is what people can or capable of within the lives they live, within the traditions they live, the cultures they are part of, and the resources and possibilities that are available to them. Individual and social choices have an impact on the welfare and the health of a population, and so does preference and any behaviour and perception that is seen to be rational for the individual in any community (Sen, 1997).

Amartya Sen has worked with the capability approach since the 1980s aiming to produce a general framework that can be used to evaluate the quality of the diverse lives that people live. This approach has been used in many large-scale programmes for global health, i.e. the United Nations' UN development programme, where 'poverty' is understood as social deprivation in the capability to live a good life (Wells, 2010). The capability approach is not limited to particular circumstances, but it is dependent on the understanding of the local community and the individuals within the community. Therefore, Amartya Sen's concept of capability (Sen, 2000) was used in the GHEFP as an important perspective for the fellows to understand poverty and social deprivation and the possible ways to develop sustainable changes for their work in the UK and Kenyan communities.

The capability approach has been developed by several philosophers since the 1980s, but for GHEFP, we have predominantly built on Amartya Sen's work. The peer-reviewed Internet Encyclopaedia of Philosophy describes Sen's Capability approach like this:

*"The Capability Approach focuses directly on the quality of life that individuals are actually able to achieve. This quality of life is analysed in terms of the core concepts of 'functionings' and 'capability'."*

*Functionings are states of 'being and doing' such as being well-nourished, having shelter. They should be distinguished from the commodities employed to achieve them (as 'bicycling' is distinguishable from 'possessing a bike').*

*Capability refers to the set of valuable functionings that are effectively available to access for a person. Thus, a person's capability represents the effective freedom of an individual to choose between different functioning combinations – between different kinds of life – that she has reason to value. (In later work, Sen refers to 'capabilities' in the plural (or even 'freedoms') instead of a single capability set, and this is also common in the wider capability literature. This allows analysis to focus on sets of functionings related to particular aspects of life, for example, the capabilities of literacy, health, or political freedom.)"* (Wells, 2010).

The quality of life that individuals are actually able to achieve is seen as the effective freedom for an individual to live a valuable life, directly dependant on the available valued functionings (being and doing).

The capability approach can also be used to explore determinants of relationships between people and artefacts (commodities) such as:

*"(1) Individual physiology, such as the variations associated with illnesses, disability, age, and gender. To achieve the same functionings, people may have particular needs for non-standard commodities – such as prosthetics for disability – or they may need more of the standard commodities – such as additional food in the case of intestinal parasites. ...*

*(2) Local environment diversities, such as climate, epidemiology, and pollution. These can impose particular costs such as more or less expensive heating or clothing requirements.*

*(3) Variations in social conditions, such as the provision of public services such as education and security, and the nature of community relationships, such as across class or ethnic divisions.*

*(4) Differences in relational perspectives. Conventions and customs determine the commodity requirements of expected standards of behaviour and consumption so that*

*relative income poverty in a rich community may translate into absolute poverty in the space of capability. For example, local requirements of 'the ability to appear in public without shame' regarding acceptable clothing may vary widely.*

*(5) Distribution within the family – distributional rules within a family are determining, for example, the allocation of food and health-care between children and adults, males and females."*

(Wells, 2010).

**Global health including the wider socio-economic determinants**

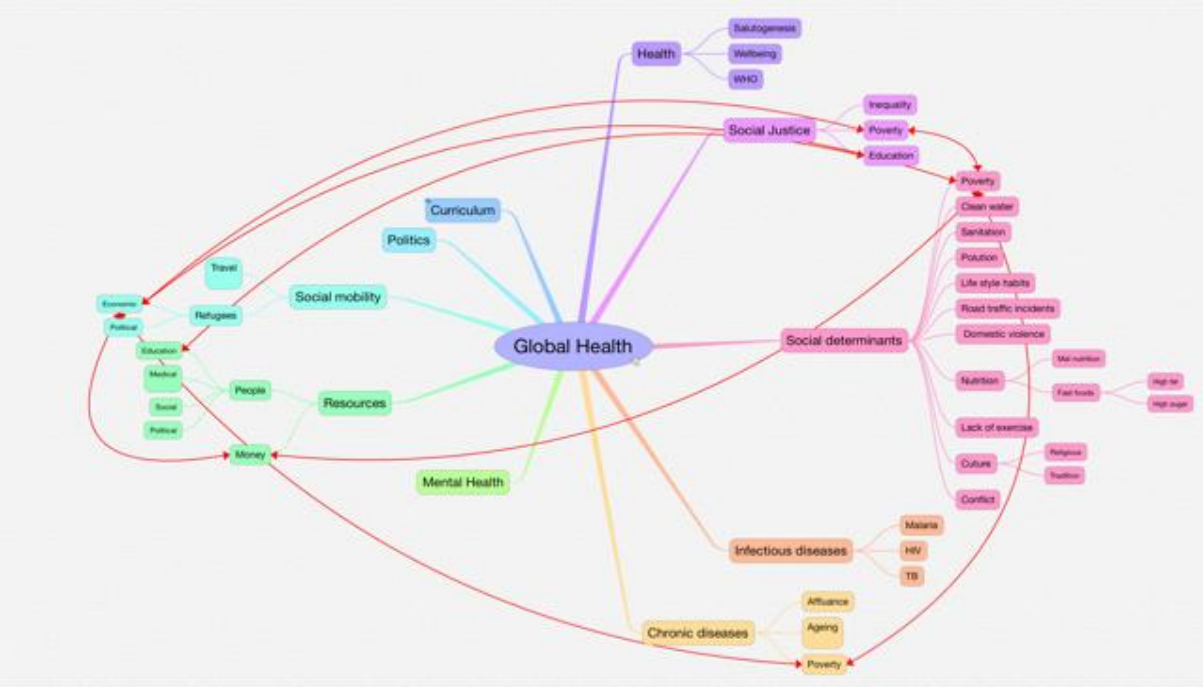
The definition of global health was discussed in the core team throughout the programme, starting from the very first day of the Kenyan induction programme.

The fellows were asked to read the paper with a suggested definition of Global health from The Consortium of Universities for Global Health Executive Board (Koplan et al., 2009). With this definition, the starting point was viewing global health as focusing on issues that

- directly or indirectly affect health,
- can transcend national boundaries,
- includes prevention in populations and clinical care of individuals
- need highly interdisciplinary and multidisciplinary collaboration within and beyond health sciences, and
- need global cooperation if solutions are to be developed and implemented, and that

Health equity among nations and for all people is a major objective (Koplan et al., 2009).

As a starting point in the induction programme the essential elements of global health were outlined in this mind map (also included in Appendix 4):




*Health* (Salutogenesis, Wellbeing, WHO)

*Social Justice* (Inequality, Poverty, Education)

*Social determinants* (Poverty, Clean water, Sanitation, Pollution, Lifestyle habits, Road traffic incidents, Domestic violence, Nutrition (Malnutrition/Fast foods/High fat/High sugar), Lack of exercise, Culture (Religious/Tradition)

*Conflict*

*Infectious diseases* (Malaria/HIV/TB),

*Chronic diseases* (Affluence/Ageing/Poverty),

*Mental Health*

*Resources* (People (Education/Medical/Social/Political), Money)

*Social mobility* (Travel, Refugees (Economic/Political)

*Politics*

Appendix 4a shows how this definition changed during the induction programme, based on the discussion within the wider team.

In line with the broader perspective on global health, Frenk encourages a broader perspective; on health institutions; on how to perceive the roles of the patients; and which components to describe when assessing health in general. *"….we should think of the health system not only in terms of its component elements (like human resources, financing, hospitals, clinics, technologies, etc.) but most importantly in terms of their interrelations…. we should include not only the institutional or supply side of the health system but also the population. In a dynamic view, the population is not an external beneficiary of the system; it is an essential part of it*…" (Frenk, 2010) *(p. 1-2).*

Describing health in terms of "component elements", "population" and "interrelations" is in alignment with the capability approach. Seeing the entire population, patients as well as non-patients as an important component of the construction of health care systems, and it furthermore links very well to the needs assessment in relation to health, suggested as a starting point for the GHEFP fellows and described below.

**Needs Assessment in relation to health**

The GHEFP fellows received a copy of the book "A practical guide to needs assessment", 3ed., by Sleezer, Russ-Eft, and Gupta (Sleezer et al., 2014). This book was given as a potential support, not the guideline. In the induction programme, we build onto the concepts from this book and earlier work from the authors of this book. During the induction teaching, we pointed out to the GHEFP fellows that Gupta and Sleezer (Gupta et al., 2007)(p 4) suggest a divide between a health needs analysis and community needs assessment:

- *Health needs assessment* is a systematic approach to ensuring the health services use its resources to improve the health of the population most efficiently, and
- *Community needs assessment* evaluate possible solutions taking problems/deficits/ weaknesses and advantages/opportunities/strengths into consideration.

Inspired by these two definitions we as the project leads/teachers suggested the fellows to use the following hybrid definition:

> ***A community health needs analysis,*** *is a systematic approach to improve the health of the community population most efficiently by evaluating the available health services and advantages/opportunities/strengths, in the search for possible solutions to problems/deficits/weaknesses in the community.*

The needs analysis model used for instruction of the GHEFP fellows during the induction programme was in this way adapted from the Sleezer et al. approach (Sleezer et al., 2014). We particularly drew on two elements from Sleezer's "Systems Model of Evaluation" (p 19); the need for analysing the different systems within the community, and the need for "*multiple sources of data, multiple kinds of data, and more than one kind of data analysis"* (p 22). As project leads, we suggested the fellows to consider numerical data, numerical rating scales, themed analysis of qualitative and visual data including observation of performance/production, concept mapping, making scenarios, and using the method of storytelling.

We gave the fellows a suggested definition of needs, also based on the Systems Model of Evaluation: "a need is a learning gap or a performance gap between the current condition and the desired condition" (Sleezer et al., 2014)(p17). Needs can be described as

- Discrepancy needs: differences between the current and ideal/expected performance
- Democratic needs: Based on what most people prefer, majority rules
- Analytic needs: determined by intuition, insight, expert consideration or enlightenment, and
- Diagnostic needs: defined through causal analysis and research

For the community assessment or "diagnosis" we suggested it to be differentiated, e.g. in relation to

- stages of life (developments and challenges for the child, the adolescent, the adult and the elder in the community)
- the environment (air, water, food, housing, exposure to hazards and sustainability)

- disease and injury occurrence and prevention (for communicable and non-communicable diseases and injuries)
- available health services and resources (public health services, health providing facilities, manpower

When the community had been “diagnosed”, the fellows were suggested, together with their local teams, to map all available stakeholders, resources, opportunities, advantages and strengths to suggest realistic and sustainable solutions. We emphasised the importance of discussing the suggested solutions with all stakeholders before the fellows were to leave the community and the feedback from the community on the fellows’ work to be captured in the fellows’ reports.

We described the benefits of this health needs analysis as described in Sleezer et al. (Sleezer et al., 2014): The health needs assessment

- frames the problems or opportunities,
- builds relationships between people,
- can provide the foundation for planning and action to improve learning, training, development and performance,
- can align resources with strategy,
- clarify the problems or opportunities,
- set goal for future action,
- provide data, insight and justification for decision making, and
- can provide a baseline for evaluation of results.

We suggested that the fellows would work in this way, using the ‘non-professional expertise’ from those who are closest to the situation, the community members, leaders and stakeholders. Asking them to share their knowledge, insights and resources these non-professional experts would be able to help the fellows to create solutions that are credible, practical and appropriate for the situation. Through this approach, the work would have the potential of supporting human resource development, human performance technology development, and international development (Sleezer et al., 2014).

### *Participants of the programme*

The programme built on different kinds of teamwork. The four fellows were supported by the three project leads, the educational coordinators, the evaluator, the general and local educational supervisors, and local community leaders and population. In this report I have used the following groupings:

**The fellows:** Two UK GP trainees, a Kenyan FD and a Kenyan CO.

**The core team:** The fellows, the evaluator, the project leads and the educational coordinators and general educational supervisors.

**The wider team:** The core team and the local educational supervisors.

**The local community leaders:** All individuals local to either of the two communities, who introduced the fellows to community key informants, and/or provided special support and coordination to allow the fellows to do their work in the community.

Within the project leads' group we all had several functions beyond the general coordination of and responsibility for the programme:

**Project lead 1** was also the empowerment evaluator and teacher in Kenya and UK.

**Project lead 2** was also an educational coordinator in Kenya, general educational supervisor, budget manager, and teacher in Kenya and UK.

**Project lead 3** was also the educational coordinator, supervisor and teacher in the UK.

### *The objectives of the programme*

The project leads set the starting objectives, including both content outcomes and process outcomes. Progressing the work in the programme the fellows discovered new skills within the group, but also needs for knowledge, and working with skills and attitudes. They

continuously developed these outcomes adapting to their own needs and the local contexts in which they were working.

Content outcomes evaluated throughout the programme were:

The content outcomes set by the project leads from the beginning of the programme were evaluated from day one. These were:

- Development of global health-related problem-solving skills

- Development of professional international partnerships

- Production of some academic output

Process issues evaluated throughout the programme were:

The process outcomes set by the project leads from the beginning of the programme were evaluated from day one. These were:

- The needs for practical and academic support to enable the described and derived outcomes and learning throughout the programme

- The needs to ensure the integration of stakeholders, culture and other contexts important to the programme's success

In accordance with the used empowerment evaluation model the objectives were expectedly developed by the team throughout the programme, based on the fellows', the core team's and the wider team's experiences.

***Recruitment of the fellows***

The UK fellows were selected through advertising (see the advert in Appendix 1), applying with the submission of their CV and a 300-word statement on how the Fellowship was envisaged to enhance personal and professional growth.

The Kenyan fellows were initially recruited from Moi University, Eldoret, Kenya among the doctors just finalising their family medicine postgraduate education. When one of the Kenyan fellows dropped out of the programme after a few weeks from start, we advertised through all available professional networks in Kenya.

All UK and Kenyan candidates were interviewed by one or two of the project leads.

The selection of the fellows focused on the candidates' experiences in working with socially deprived populations, previous work abroad or in cultures different to their own, and on their availability for the specific period, including possible social responsibilities incompatible with engagement in the GHFEP.

***Recruitment of the local supervisors in Kenya***

The local Kenyan supervisors were recruited through the professional network of two of the project leads. The criteria were that they had several years of clinical experience, research experience, local cultural knowledge about the community in Kenya, and that they were based locally. With these criteria, we wished to recruit supervisors who would be able to have ad hoc meetings with the fellows during their work in this community. One of the local supervisors also had many years of supervision experience, and both had considerable clinical teaching experience.

***The induction programmes in Kenya and the UK***

The induction programme in Kenya was planned to cover a general introduction to the concept of global health, the theoretical platform of the programme, suggested methods for the health needs analysis and development of sustainable local solutions, as well as a more specific introduction to the cultural and traditional aspects of health in the chosen area. The induction programme in the UK introduced the fellows to the GP surgery chosen to be their working base, and also covered a specific introduction to the cultural and traditional aspects of health in the chosen area. For the Kenyan fellows, this induction programme also

included two days of "sitting in" with the UK educational supervisor and coordinator to allow the Kenyan fellows to experience the traditions and culture of patient encounters in UK general practice. The induction content is detailed in Appendix 3.

### *Specific elements taught during the programme*

The facilitation of the programme built on the development of perceived needs in the wider team. Apart from the induction programme some specific elements were taught in response to these needs as they arose. These specific elements included

- The structure of the National Health Service in the UK
- Consultation models in the UK general practice
- Capability approach in relation to practical application, Health as a Human right
- Writing condolence letters (focusing on the doctor-patient relationship)
- Poverty definitions and applications to academic work
- Complexity models and complex systems
- Group dynamics
- Teamwork in conflict situations
- Collecting and analysing qualitative data
- Communicating qualitative results
- Presenters' skills (preparing and delivering the academic presentation)
- Literature search and management for academic writing
- Writing academic reports and papers

### *Ethical considerations*

The fellows were not expected to deliver any health services, and the project was not a research project, but an evaluated educational health service development project with the aim of health needs assessment in a socially deprived area of Kenya and the UK. Ethical approval was therefore not needed. The fellows' professional and academic responsibility towards individuals in the two communities were discussed, and we agreed that because the fellows were working with the local health professionals in the communities, there would always be a local and authorised health professional to act in situations where intervention was needed. The fellows were aware that they had full academic responsibility to treat all collected data as confidential, and to protect the individuals from being recognised as specific persons in the reports the fellows were writing.

All data collected by the fellows will be stored safely on the Health Education England East Midlands' Virtual Learning Environment only possible to access with a password given to the members of the core team. Before entering this domain online, all data will be edited to remove all person identifiable descriptors. The data are kept to allow future health needs assessments and community works to apply for access these data to build on to the data collected by the GHEFP fellows.

# The evaluation of the programme

The aim of the programme was to allow young health professionals develop their understanding of global health through working with socially deprived communities in different parts of the world. The evaluation strategy and evaluation methods were chosen to maximise the learning potential of the relatively short period, and they were chosen in acknowledgement of the described outcomes being processes of learning rather than numeric outcomes. Hence, the minimum evaluation aimed to answer two questions:

- To which extent did the fellows meet the objectives? and
- What were the important elements of the process which they worked with to achieve the objectives of the programme?

The point of departure was to use process evaluation with an action research design to allow continuous responsive and dynamic development, based on the actual development of the fellows. A few weeks into the programme it was clear that the selected fellows would be able to base their work on the same principles as the evaluation, allowing the use of an empowerment evaluation model. The timeline for the programme and the planned as well as added evaluation data collection can be seen in Appendix 2.

### *Fetterman and Wandersman's Three-step approach of empowerment evaluation*

The evaluation conducted can be described as process evaluation in a participatory action research design, using an adaptation of Fetterman and Wandersman's Three-step approach of empowerment evaluation (Chatterji, 2001; Fetterman and Wandersman, 2007; Fetterman, 2015, 1994).

Empowerment evaluation was chosen because the purpose of the programme was capacity building at two levels: The fellows building capacity in the development of their understanding of global health issues, and the fellows supporting the two communities building capacity to develop sustainable solutions to global health issues. Empowerment

evaluation allows the participants of the programme to lead the development of the programme, based on their previous experiences and experiences arising from taking part in the programme. Empowerment evaluation is dynamic in being responsive to the changes in contexts, values and merits that the participants' experience when taking part in the programme. The model includes an empowerment evaluator facilitating the group in the continuous circle of the three steps:

1. Establishing their mission or purpose.
2. Assess their current resources and needs as "the current baseline".
3. Plan the next steps in their work, i.e. specifying goals, strategies to achieve goals and getting credible evidence.

In empowerment evaluation, the participation of all involved is not demanded but invited and encouraged to allow examination of issues openly within the entire team of participants, facilitators and others involved in the programme.

The approach is recommended to be adapted to the actual group, as long as the ten principles are in place for the evaluation work:

1. Improvement
2. Community ownership
3. Inclusion
4. Democratic participation
5. Social Justice
6. Community knowledge
7. Evidence-based strategies
8. Capacity building
9. Organisational learning

10. Accountability

The Appendix 6 show how the ten principles were applied to the level of the fellows' own development, and to the level of the fellows' work with the two communities.

### *Evaluation methods*

As prescribed by the empowerment evaluation model different types of evaluation methods were used. In the empowerment evaluation model, the evaluator supports the participants in their work through teaching evaluation methods, but also by collecting evaluation data about the process and the outcomes of the participants' work in the programme. This paragraph describes the evaluation conducted by the evaluator, whereas the fellows' work and methods they used are described in the section on evaluation of outcomes.

Some empowerment evaluations have used e.g. a ten point scale to establish the perceived progress among the participants as a kind of "reality check" (Fetterman, 1994)(p. 4). In this programme, I did not use quantitative evaluation methods but chose to follow the fellows, educational supervisors and coordinators as well as the community stakeholders with qualitative research methods. Using the same qualitative research methods for my assessment of the fellows' progress as I taught the fellows to use for their community work, they were allowed to experience the methods from the informant perspective as well as from the interviewer perspective. Early in the programme one of the fellows also participated as an observer in one of my interviews of a stakeholder.

As the evaluator I conducted

- Repeated in-depth individual interview with all the fellows, educational supervisors, educational coordinators and selected community stakeholders in Kenya and UK.
- Repeated open-ended survey questionnaires for the fellows, educational supervisors and educational coordinators at the beginning and end of the two placement periods and in relation to significant events. These questionnaires were distributed electronically through the use of the web-based tool SurveyMonkey©

As the evaluator I also called for regular evaluation meetings with the core team, where progress and possible new needs were discussed, setting up teaching sessions or giving other kinds of support needed for the fellows to progress their work with the communities including the reporting of their work.

Furthermore, the fellows all evaluated their progress and experiences with diaries/reflective notes and photos; all shared with me as the evaluator.

A Whatsapp group was also started at the beginning of the pilot period, allowing free communication among the wider team, but also indicating when meetings (Skype or face to face), different kinds of support or teaching sessions were needed.

Throughout the entire project, the fellows all participated actively in delivering data for the evaluation of their progress in the programme. They also all delivered data from their work in the two communities, enabling the two communities to develop a new understanding of the health needs of the community, as well as possible solutions.

The basic evaluation questions exploring how the fellows were progressing were chosen at the beginning of the project by the project leads. These questions aimed to ensure a description of a starting point, and later enabling a minimum/basic evaluation to describe if development was obtained within the fellows' self-perceptions and understandings of global health.

The basic evaluation questions were:

1. Has a needs analysis model been used, with the fellows working with the local health teams, including stakeholders of the community, developing the fellows' global health related problem-solving skills?
2. Have the fellows managed to develop professional international partnerships and the production of some sort of academic output?
3. Have the fellows succeeded in carrying out a health needs analysis leading to the identification of global health issues in both communities, acknowledging the individual's needs as well as the population's needs

4. Have the fellows succeeded in suggesting sustainable and locally resourced solutions to the identified global health issue?

5. Have the practical circumstances been optimal with good and supporting recruitment, sufficient correspondence and preparation for the programme with appropriate practical and academic support, to enable the described and derived outcomes, the fellows' learning throughout the programme, and ensuring the integration of stakeholders, culture and other contexts important to the programme's success.

Progressing the work in the GHEFP new questions arose in every interview, every survey and every evaluation meeting. All questions were pursued, and possible solutions were discussed within the entire team of fellows, supervisors and project leads. When new needs arose among the fellows, we arranged for a teaching session or other types of support needed.

The stakeholders interviewed before the start of the work in the two communities were chosen based on the project leads' different networks and expectations of specific people that we thought would play an important role in the fellows' work. The stakeholders interviewed at the time when the community work had been done, were chosen by the fellows with the criteria of people/organisations or institutions that had been essential in the fellows' community work.

### *Analysis methods*

All data was used in the evaluation. The interviews were transcribed in summary with selected passages transcribed verbatim. A full verbatim transcription would have more than three-doubled the needed budget for transcription, so the strategy was chosen to keep within the £1500 budget for the transcription.

All interview data and all written texts (diaries, reflective notes, survey responses) were analysed in two stages: First stage was a data-led themed analysis answering the basic

evaluation questions. The second stage was a theory-led content analysis (Spenzer et al., 2003) with the ten principles of empowerment evaluation as the theoretical frame of reference (Fetterman, 2015).

### *Data*

The data created as part of the evaluation of the fellows progress in programme included

Repeated in-depth interviews with

- fellows (In total 12 interviews, duration between 1 and 2 hours)
- supervisors (in total 4, duration between 60 and 90 minutes)
- project leads (in total 6, duration between 45 and 75 minutes)

Shorter interviews with stakeholders in the two communities (in total 35 interviews, duration between 20 and 45 minutes).

Appendix 7 shows the interview guides for these interviews.

Repeated short surveys for the fellows and supervisors/project leads (at the beginning and end of the two placement periods, 9-17 questions per survey). The questions reflected the development of the progress in the programme, specific issues that had been flagged up either with the entire team or with me as the evaluator. The surveys were sent out immediately before an evaluation meeting/interviews to enable the team members to flag up issues and to get the team members to start thinking about the smaller or bigger picture of the programme before our meeting/interviews. The questions can be seen in Appendix 8.

Reflective notes and diaries from the fellows (in total 41 handwritten notebook pages, and 29 typed A4 pages).

Data from the evaluation meetings (in total ten meetings, from two to six hours) with all fellows and mainly with the participation of all project leads. Meetings before the fellows started the programme, November 2014 to August 2015, have been used as background

data for decisions and developments during the evaluated period from September 2015 to March 2016.

Some of the fellows also shared photos, poems, and other illustrations to describe important developments or insights, and these were used as supporting the understanding of the other evaluation data.

# What did we learn from the evaluation?

In this section, I describe the results of the evaluation. There are two parts:

I. the basic evaluation of ***the fellows development*** participating in the programme, in relation to content and process outcomes, and

II. the empowerment evaluation of ***the programme's impact*** on the fellows development and the communities that the fellows worked with

### *I. The basic evaluation of the fellows' development*

The basic evaluation of the process is structured in accordance with the expected process and outcomes of the programme, described in the original project plan.

The short version of the basic evaluation is that the fellows successfully developed if assessed against the intended outcomes of the project plan. Below is a description of how and in what way the fellows achieved all intended outcomes.

The basic evaluation questions were:

1. Has a needs analysis model been used, with the fellows working with the local health teams, including stakeholders of the community, developing the fellows' global health related problem-solving skills?
2. Have the fellows managed to develop professional international partnerships and the production of some kind of academic output?
3. Have the fellows succeeded in carrying out a health needs analysis leading to the identification of global health issues in both communities, acknowledging the individual's needs as well as the population's needs
4. Have the fellows succeeded in suggesting sustainable and locally resourced solutions to the identified global health issue?
5. Have the practical circumstances been optimal with good and supporting recruitment, sufficient correspondence and preparation for the programme with appropriate practical and academic support, to enable the described and derived outcomes, the fellows' learning throughout the programme, and ensure the integration of stakeholders, culture and other contexts important to the programme's success.

1. **Has a needs analysis model been used, with the fellows working with the local health teams, including stakeholders of the community, developing the fellows' global health related problem-solving skills?**

*The use of a health analysis model:*

None of the fellows had done a health needs analysis before. However, they all had relevant experiences for learning how to do a health needs analysis, and during the induction period in Kenya, they shared their knowledge on public health, epidemiology and their previous experiences with "community diagnosis" and "community entry" (Department of health, 2009). Later they also drew on one of the fellows' experiences with resource mapping in a community (Croucamp et al., n.d.; The Population Council Inc. and Ministry of Health/Ghana Health Service, 2009; Vermeulen et al., 2015). It was an essential goal for them to develop their understanding of what an appropriate health needs analysis could be in the two communities they were going to work with. During the induction programme in Kenya, the project leads suggested "health needs analysis" defined as:

***A community health needs analysis,*** *is a systematic approach to improve the health of the community population most efficiently by evaluating the available health services and advantages/opportunities/strengths in the search for possible solutions to problems/deficits/weaknesses in the community.*

During their work in both the Kenyan and the UK community, the fellows did exactly that. Their starting point was to contact important stakeholders of the community. Using community entry methods (Department of health, 2009) and a snowballing technique (Atkinson and Flint, 2001; Petersen, 2005) they sought to engage with as many individuals and representatives of community groups they could manage within the given time. The fellows worked systematically with data collection of individuals' perceptions of health, and in response to their findings they did a comprehensive resource mapping of each of the communities.

In the first community, the fellows developed a questionnaire intended for data collection in a sample of the community households, collected through door-to-door contact. However, the time set aside for the work in the community did not allow a quantitative-qualitative mixed method design. Instead, the fellows used qualitative mixed methods to collect their data. The planned, systematic way they used these different methods enabled them to develop a community prioritisation method, "The Voting Method" inviting all, and listening to all of the engaged community groups. Despite a very widespread invitation and extensive presence in the two communities, all individuals from the two communities did not take part in the fellows' work, so they actively sought the broadest representation possible to reach. After the fellows had concluded their work in the UK urban community the fellows even set up a link to a survey, inviting all from the community to suggest more solutions to the identified health issues (What recommendations do you have for solving any of the following issues in [the UK community]?). The GHEFP and the fellows' work with the community were also reported in the newsletter produced by one of the local community projects.

*Working with the local health teams:*

Working with the local health providers in the communities was enjoyed by all the fellows.

> *"We had a really interesting day today, and I feel so privileged to be here. This morning I met one of the local traditional midwives - older ladies from the community who deliver the babies in the village... " (Fellow, October 2015)*

> *"I found talking with the traditional birth attendants an incredible experience. To learn how they practised, the procedures they used, and how these paralleled in some ways modern medicine, but without the teaching - just experience passed down. I felt that there was so much to learn from these women." (Fellow March 2016)*

> *"In the (UK) surgery where we were based, they were just so welcoming; we really felt welcome!" (Fellow, March 2016)*

The local health professionals whom the fellows had been working closely with also expressed that the collaboration had been important for them:

> *"It was a really good experience to work with them, awesome… they are quick thinkers, (they reacted) so fast on an opportunity they had and made things better for the community immediately". (The local health professional, November 2015)*

The fellows also worked with the existing local (and more distant, but responsible) health services and health officials. In Kenya, the collaboration included a newly employed community health professional, who was working in a nearby location, the traditional birth attendants, community health workers in the nearest town, and officials in the county and sub-counties. In the UK, the work base throughout their stay was a local GP surgery. The local health professionals responsible for the community found the GHEFP a good and interesting programme, but also expressed concern:

> *"We have SO many different people and organisations coming here every month with new campaigns, promoting this, promoting that, and then we never hear anything after they have been here, and they just disappear because the next project, the next campaign is moving in, and I sometimes think, Ah... another project that we are going to do, and it's not going to go anywhere, so... we just hope what we are saying yes to actually helps someone somewhere, and that's when you are on project 1 or 2 but... you know when you are on project 200....one day it is a new guideline for diabetes for (one ethnic group), the next day it is cardiovascular problems for another and they all come and say, well this is really important and the (regulatory body) is expecting us to take all this on board... we just need some kind of filtering...because we are just overloaded..it needs to be condensed and focused because we are really losing energy ....before we get started, if we can focus we can help, but we can't if it is from all over the display". (Health professional, March 2016)*

The closest collaborators were community leaders, working with smaller or larger community engagement projects covering health as well as socio/cultural issues. Some of them had experienced the difficulties in getting support for local health-related projects:

> *"We cannot get to engage with doctors; doctors are really difficult... I have gone to doctors surgeries because I have got this football project, ... it's quite relevant to health, but … I have actually never got the chance to talk to a doctor here in [the UK community] at community level, you just can't get through, they are so busy, they are not around at any of the events, you don't meet them in the street, you don't knock on their door, ...so if you come to a surgery to talk with a manager of the surgery what they will say is, the NHS just can't work with a small project that is set up for maybe six months, people just come and go, it's just the time scale, it wouldn't make sense to engage, they would say, so I (have asked) how could we perhaps work together, so how can the doctors get to know about (the projects), how can we work together, the manager said that it is just not possible to create that partnership, it is too small. If it was something that has been here, say 30 or 40 years, okay, but a project of six months, it might take five years to get the partnership developed. …I also tried to engage the academies and the schools, but it's the same... but it's incredible because there are so many possible links (a youth club and the school, a football club exercise and health,*

*community kitchen and diet, food, health), but just not possible…" (Community lead, March 2016)*

The fellows also collaborated with the local public health officials who were the responsible health authorities for the area.

Especially the health officials responsible for the health in the communities underlined the necessity of bringing their perspective in even before the programme work should start. A health official responsible for the Kenyan community expressed it in this way:

*"….we have not been able to document (the Kenyan community's health needs) in the past. What is their number one health concern – is it respiratory tract infection, is it HIV – so that is something we have not been able to do for [the Kenyan community] in particular and that is where I guess you (GHEFP) come in….(Previous campaigns have not worked with this community, when they tried a national campaign for sanitation) they saw it as an insult. .... Yet, it was supposed to open their eyes to see (the problems with not having toilets)…because it will get into the water, it will get into food, it will get to your children so in short (when we go there it is seen as) infringing on their culture, speaking about these issues in the open….(the data the GHEFP can create) about their health needs (could help us) move forward from there because that would inform our interventions …. so that I can make informed decisions when put in interventions there. Before they (the fellows) show that information to anyone else … they should come here, and then we discuss (where to go next)" (Health official October 2015)*

The data was shared with the health officials and the consequence was the creation of a dialogue between the responsible health officials and the local health professionals in the Kenyan community. After the community meeting, where community members had prioritised their health needs, the fellows presented the prioritised list of health needs to this health official. The health official described the outcome in this way:

*"I am very happy that you (the project leads) came to me first, that showed that you wanted us to know what you are doing, and that it was not just an opportunity for you to go and do for yourself, that you have worked with the community there, and that ...you have worked with the local universities, local academic institutions, not just collect data and go away, so I am happy with this kind of engagement.... In other projects people just come to collect data...we don't know what is going on...we see the data communicated in a journal, greatly altered, but we have not known about the project at all... With your project, I have been very happy.... I have been able to engage with you because I was involved from the beginning..... It has definitely been of value, especially (understanding) the health priorities for the area,*

*we will definitely use this to work to start where they (the community) see their biggest challenges. For me... I can see now where to start...and if other people come to ask if they can do research I can point them in the right direction ... to start with the (community) priorities..." (Health official November 2015)*

In the UK setting the message from the locally responsible health officials was almost identical when talking about the need for this kind of projects:

*"We don't have the resources to do this kind of health needs assessment in the communities, so for us, it is very helpful that a project like this (GHEFP) has provided us with data about the prioritisation in the community.."(Health Official, March 2016)*

Unfortunately, the project leads did not succeed in integrating the health officials in this community from the beginning, and this made it difficult for the fellows to work with them to the same extent as had been possible in Kenya:

*"I was introduced to (the fellows) by a community leader only last week... I have tried to get (other health officials) interested in this (GHEFP) project since... but when I asked (other health officials) about the meeting we are having next week with (the GHEFP fellows) what this project was about they said "Oh yes, we got an email about a month ago from one of the people in the project, but we don't know them and what this was about, so we didn't take it up...". So I think there is some learning there about how that approach is made.... to make it part of our agenda. What they (the other health officials) had done, they had sat around in the (local health) team, and said, does anyone know this person, and they had said, no, we don't know who they are, where this person comes from, so we will just politely say no thank you. ...The (fellows) sent it from not from a Gmail account... they should have sent it from the deanery, I think it needs that more corporate clout... to get it in front of the right people... and also, alert them in the beginning, get them involved in the beginning, so that you have their interest, and not just say do you want to see our research results. Not that we should influence the outcome of the research, but if we are part of the project from the beginning, we will be much more receptive and supportive..and perhaps actually do something about it..." (local health official, March 2016)*

*Working with the local stakeholders:*

Interviewing the stakeholders of the two communities if they felt they had been included and heard by the fellows the main perception was that all the fellows had been extremely accommodating and sensitive to the life in the communities, listening to the leaders of the communities and engaging with people's everyday life in the community.

*"They were SO, SO good with my group, they came here, they had even found a white coat and a stethoscope to dress up for a little role play, pretending they were calling the doctor... and they told (us) when to call the emergency number, .... the group really liked them, we laughed a lot,.....Every time I have to call for an appointment for (my doctor) now, I keep seeing (one of the fellows) shouting in that role play "but why can't I call this emergency number, I really need an appointment this week!"(Community leader, March 2016).*

Global health-related problem-solving skills:

The outcome of developing the fellows' global health-related problem-solving skills was at the heart of the evaluation throughout the programme. Their development was evaluated by using start, middle and end questions in the surveys as well as in the interviews, exploring the development of the individual fellow's understanding of global health and their perception of own problem-solving skills.

<u>Global health definition:</u>

All fellows started the GHEFP with a predominantly disease focused perception of global health. The induction programme included teaching and time to discuss the global health definition as described above.

During the programme, all fellows changed their definition of global health. Before the start of the programme, I asked the fellows what they expected to work with, and what kind of global health issues they expected to find in the two communities. The answers were typically in the line of:

*"Probably things relating to poverty as well. I don't know I haven't worked in [the UK community] but … a lot of poverty and overcrowding and a lot of big extended families living in small houses in some communities. Access to health care, language barriers and things. Drugs I would expect to be quite high and then the consequences of that. Mental illness as well." (Fellow September 2015)*

*"I am not so sure; I have never been in that community…. When I first heard about the project (GHEFP) I … went online and (looked up) the eight Millenium Goals…. but initially, I thought it was mainly political. Now when I look at them (I can see a connection), I don't know, perhaps something like maternal mortality, HIV and other current diseases." (Fellow September 2015)*

At the end of the programme all the fellows had developed a more comprehensive understanding of global health.

> *"Global health is the complex interplay between factors of **culture**, **environment**, and **experience**.*
> *In relation to culture, it is related to the cultural norms, expectations and aspirations of the community.*
> *It is also related to the impact of the environment surrounding the community. This includes both the physical environment, in terms of achieving Maslow's basic needs, but also the political and governmental context, in terms of health policy and local governance.*
> *Experience relates to the experiences of that community, the impact of history on how the community operates today, and how previous experience and history will impact on decision making of those within the community." (Fellow, March 2016)*

> *"…global health (has) complex aspect of health of all populations without considering any boundaries… …The globe is a sphere and therefore …. From a spherical view, (we have) one centre from all views. There are different sources, (different) causes of problems from different localities that lead to similar health impact, (and) solutions to these problems require partnership collaboration to solve the problems; therefore (the need for) shared solutions. This makes the problem a shared problem irrespective of whether it is from a developed or developing locality. We all share a common centre….. Creating an equality ground of health status, provided to all people in the world. (Fellow March 2016)*

<u>Problem-solving skills:</u>

All the fellows saw themselves as "ok" or "really good" problem-solvers. All of them, however, experienced difficulties in solving problems in working within the fellows' group. Most of these problems arose due to differences in values, religion, professional education, and cultural interpretations.

One example was the difficulties the group of fellows experienced when they discovered that girls in the rural community were sexually active from the age of 9 to 10 years. Aiming to facilitate solutions in this community they discussed possibilities. From a western health promotional perspective the response could be the ABC Approach (Abstinence, Be faithful, Use Condoms, (US Global AIDS Coordinator, n.d.)), but from a Roman Catholic perspective, an ABC approach would perhaps not be the first choice. From a cultural perspective, the children of this community were sharing beds from when they were born until they married, and living very close to animals, sex was part of normal life at any stage of the children's lives. Without discussing the fundamental differences in the fellows' personal values and

professional perspectives, the group went into an escalating conflict on how to facilitate the community towards sustainable solutions for better health in relation to the consequences of the girls' early sexual debut. We set up teaching sessions on group dynamics and de-escalation of conflicts when the situation became clear.

This episode all the fellows returned to in most of the surveys and the interviews I had with them. For most of the fellows, this episode had meant a need for self-reflection they had not encountered before, learning a lot about themselves including their developing problem-solving skills and skills important for their academic career.

> *".. as I started to write the objectives for (one of the papers on our work), it slowly dawned on me that I am not the same (person) that got on the plane …. (a few) months ago. I've been taught (and I've learned), been stretched and pulled, and finally I feel like I've actually grown. Those objectives struck a chord deep within and opened my eyes to truly see. To truly see that we all, though often at arms have come out better equipped to face the real world; the world after exams …. Problem- solving skills, multidisciplinary collaboration, cross-cultural communication, good old resilience and the backbone of leadership. And perhaps, only if I'm really lucky, a mastery of my fear of public speaking after the thousand and one presentations lined up for next week! (Which I'm clearly looking forward to!) (Fellow, March 2016)*
>
> *"Nervousness*
>
> *I would not have known that senior people who have been addressing big crowds of people also feel nervous. I feel nervous whenever I am to meet new people and doing a presentation or talking to senior people. I used to console myself by whispering to myself maybe it is because I have not talked to a large number of people before and will get used to it with time... never be nervous. I have come to understand that it is a normal body mechanism and what is required is to know how to deal with it, have measures ready to handle it, resume composure, confidence and deliver the message". (Fellow, January 2016)*

At the end of the programme, one of the survey questions were if the fellows thought that they had gained global health-related problem-solving. The four fellows replied:

> *"I hope so. I think that through gaining a full understanding of the setting in which a problem arises, and listening to those living the problem, you can find many answers".(Fellow March 2016)*
>
> *"Yes. I have learned a process of defining a community, entry and engagement to formulate long-lasting solutions to the problems as they see them. This is a reliable approach that can be applied in any community in the world".(Fellow March 2016)*

> *"yes. Through this project, I can clearly see health problems from a broader perspective ... there are so many factors contributing factors to ill health. When solving a health problem a quick fix or emergency care management may only solve the symptoms but it does not solve the problems and therefore, we need to dig deeper. Solving health problems is not a one man show it is not about the doctor alone; it is an interactive process".(Fellow March 2016)*

> *"Yes. I have a better theoretical and practical understanding of global health now... and I have developed a wide range of trans-cultural related problem-solving skills". (Fellow March 2016)*

Apart from the self-perceived development of global health-related problem-solving skills, an illustration of their progress was that the fellows developed a community engaging method to explore the existing and prioritised health issues and that they tested this method to be efficient in the two different communities. This outcome is the topic of abstracts that have been accepted for several conference presentations in the next few months, and the fellows are, at the time of this report being written, finalising a manuscript to be submitted for publication in an international academic global health journal.

**2. Have the fellows managed to develop professional international partnerships and the production of some kind of academic output?**

*Development of international partnerships*

Before the GHEFP started none of the fellows knew each other, none of them knew the local supervisors in Kenya or the project leads. Two of the fellows had heard of one of the communities, but none of them had worked in these communities before, in fact, the two UK fellows had never been to Kenya and the Kenyan fellows had never been to the UK.

The fellows were all health professionals, but apart from that they represented a wide range of educational, cultural, faith and social backgrounds. Working as a team closely together for six months sometimes challenged what the individual fellow would normally take for granted. All of the fellows reported on situations that had been difficult because of different perceptions, opinions, expectations, and sometimes also values and faith or belief systems. Sometimes the challenge was within the group, other times it was in the meeting with people from the communities the fellows worked with.

> *"I had my belief system challenged by one of the new friends we made. An idealist with a similar "strict" Christian upbringing, but with (other religious) roots, who dared to challenge the status quo and forced me to revisit and rethink the foundations of my faith which was a very uncomfortable but enlightening experience for me. This person was also instrumental in opening my eyes to a need for new levels of tolerance particularly in most African societies, citing the laws and inhumane treatment of homosexuals on the African subcontinent as a prototype. Observing the display of genuine humility in the approach to a foreign language and culture, I learned to be more real in my interactions."(Fellow, February 2016)*

Apart from the introduction to each other and the wider team as well as a few stakeholders in each of the communities, the fellows were given the opportunity to build relationships at the international conference on patient-centred care in relation to the Kenyan induction programme. The rest of the opportunities they had to find through the work with the two communities.

The conference was a fortunate coincidence in time, place and theme, and the core team's participation was funded separately from the GHEFP budget. It was an opportunity appreciated by the entire team, including the local supervisor who was funding her own participation. The perception of the timing and usefulness of the conference was united across the wider team as relevant, introductory to the health care system, health issues, cultural aspects of health care as well as team building for the wider team:

> *"The conference on "Patient-Centred Care" provided a further opportunity to network and learn more about the Kenyan Health system."(Fellow, October 2015)*
>
> *"The patient centred conference couldn't have come at a better time during the induction... It provided a rare opportunity for networking with like-minded individuals and "think globally, act locally" is a phrase that I gathered there and it shall keep illuminating my path in thought and informing my choice of attitude and action." (Fellow, October 2015)*
>
> *Participating in the Kenyatta Conference, particularly listening to patient's experiences improved my understanding of the challenges of the Health Services in Kenya. It was interesting to listen to the overwhelming evidence supporting "Patient-Centred Care" and the need to foster better relationships; which made me realise the importance of teaching and mentoring and simply building strong relationships. ...Learning about improving the acceptability of nutritional supplements provided, largely based on appearance was useful. The conference was also a very good opportunity for networking with the potential for future collaborations to promote global health." (Felllow, October 2016)*
>
> *"Good networking and supporting colleagues." (Project lead, October 2015)*
>
> *"The conference was enjoyable. The theme struck a cord with me as the theme of compassion ran through all the keynotes and most of the presentations." (Project lead, October 2015)*
>
> *"The conference was lovely (with) quite a number of eye-opening presentations, I realised how easy it is to present work and this encouraged me to carry out more research. I got the opportunity to be a moderator and learn how to do this in the future. I also like the fact that I was able to engage with other family physicians within the East African region and build networks with those working locally in Kenya."(Supervisor, October 2015)*

At the end of the programme all the fellows saw the members of the wider team as international professional partners with whom they expected the possibility to develop professionally:

> *"...The fellows and supervisors represent eight different professions from eight different universities working in different departments in health service and from eight different ethnicities both Kenya and here. This kind of coming together has a been a platform for people to share knowledge from different professional grounds, learning from each other, networking and bringing closer to our eyes what would have been considered far away before this project." (Fellow, March 2016)*

At the end of the programme half of the fellows mainly expected "international partnerships" to be understood as the *fellows* working in partnership as a peer group, whereas the relationship with the supervisors and project leads was expected to be more about the fellow's own professional development and opportunities:

> *"With the fellows: we have worked together for six months and I would like to continue working with the team in similar assignments such as writing papers, publishing, presentations and learning more by teaching, all which are lifelong. With the project leads: As mentors, I hope to tap from their wealth of experience in research and as educators to feed my academic growth along the same path. I shall trust their independent appraisal for academic work that I shall set out to do." (Fellow, March 2016)*

A few of the fellows also told about possible partnerships beyond the team whom they had met during the programme, and established a good contact with:

> *"Well, there are no formal agreements or arrangements in place, but there is potential for collaboration with the Kenyan supervisors, an NGO called XX, one called YY (a company with a non-profit presence in Kenya) and of course the three other fellows". (Fellow, March 2016)*

At the last interview, all the fellows expressed that they could see themselves as future supervisors in a programme like the GHEFP and that if such a programme should run in the future, the project leads were welcome to contact them.

*Producing some sort of academic output*

Two of the GHEFP fellows had a master's degree during which they had produced and successfully submitted their master's thesis. One had also orally defended the Master's thesis.

Two of the fellows had given informal presentations to colleagues, but none of the four fellows had published academic work before they started the programme.

> "*I have never published before and I am told (that) there are always difficulties, but I believe if we write a good report, we (will not) have a problem being published so the challenge is how to make it good… With your guidance, I'm sure that we will ". (Fellow September 2015)*

Producing the reports on the work in the communities caused difficulties particularly in relation to structuring the reports, referencing the report and the use of written academic language. For each of the two reports one of the fellows volunteered to lead the work, but with no or little previous training in academic writing, this task became almost insurmountable, and one-to-one writer's guidance sentence-by-sentence was a necessary support from the project leads to allow the fellows to complete the reports.

> *"I didn't know what to expect, thought this report is killing me, so I am so grateful that (you) sat down with me and I was tired, but it was done!…" (Fellow, March 2016)*

During the programme the fellows made strategies and planned their work in the two communities, they collected the data together, and they all contributed to the reports about the work in the two communities. Throughout the GHEFP, all the work was facilitated by the supervisors and the project leads. At the end of the programme, the wider team had a huge pool of data to use for presentations and other academic outputs.
Without previous experience of writing academic papers this task was another challenge for all the four fellows:

> *"Writing of articles is challenging, sometimes I feel like I never been in any form of school!" (Fellow, March 2016)*

To support the production of academic papers for international journals we arranged a two days writing seminar, where we decided on the topics for four academic papers based on the work, each fellow taking responsibility to write the first draft and be the lead writer on one of these four papers. The writing seminar gave the fellows some tools. When asked at

the end of the programme if they thought they had achieved the goal of "producing some sort of academic output", they all agreed:

> *"I think so. I have learned so much. I hope to use the skills (I have) gained for further qualitative research, and aim to publish (part of the GHEFP work) soon". (Fellow, March 2016)*

> *"Yes, (the) skills I have gained include report writing and from the more recent writing seminar, a structured approach to writing an academic paper. We have also been introduced to a reference manager to aid our academic writing. There is a view to producing several academic papers based on our work and experiences as Global Health Fellows - still a work in progress at the moment." (Fellow, March 2016)*

At the time of the writing of this report, two of the four papers are progressing well, and expected to be submitted within a few weeks. A third and fourth paper are promised to be with the group soon.

The fellows have also presented their work to different types of audiences in the communities; school children, community leaders, community clubs and members, health professionals, medical educators and health and social authorities. After their first presentations of the project, a session was set up on presentation skills including planning and delivering a presentation to different audiences, settings and strategies. The feedback from their presentations was very positive.

Three abstracts have also been accepted for oral presentation/poster at two different international conferences this summer.

3. **Have the fellows succeeded in carrying out a health needs analysis leading to the identification of global health issues in both communities, acknowledging the individual's needs as well as the population's needs**

*Identification of global health issues:*

The use of a health needs analysis model is described above in the section on the basic evaluation question 1.

The fellows developed a voting model and tested this model in both communities. The model included the steps of

- engaging the health officials responsible for the community's health;
- community entry;
- qualitative data collection on perceived health needs with the identification of health needs themes;
- presentation of the themes to the community and allowing the community to prioritise the themes according to perceived importance;
- feeding back to the community and discussing possible solutions within the available local resources, and finally
- handing over the report and findings to the community.

The model needed a little adaptation to the two contexts, but it worked well for the fellows in both communities. As you can see in Appendix 4c, the fellows were encouraged to use any model, and if they saw it necessary, they could use a different model for each of the communities.

Using the same model for the health needs analysis and prioritisation allowed the fellows to set aside their own pre-understanding of global health, and their expectations for the content of global health issues in the two communities.

When asked if anything had surprised the fellows all answered that the similarities in health issues and priorities were totally unexpected:

> *"When we compared our findings for the presentation, I was struck by the commonalities between the two placement sites". (Fellow, March 2016)*
>
> *"I was surprised to find similar problems in a developed country. I did not expect to find extreme poverty in a developed country." (Fellow, March 2016)*
>
> *"I am surprised that some problems seem to be the same as (in) Kenya, This is interesting considering this is a developed country. The main difference come in the definition of the problems, but they actually lead to similar problems in health; for example overcrowding of people in one house leads to similar health problems, the difference is that one is in a manyatta traditional house and the other is in a modern house." (Fellow, December 2015)*
>
> *"In Kenya we found problems of underweight; In the UK, we found problems of overweight. Both are malnutrition conditions that are a result of poverty and deprivation. Lack of resources to access any food or proper food. People walk miles to look for food in order to solve their underweight status, People walk for miles to burn calories and solve the overweight problem." (Fellow, February 2016)*

The work in both communities was described and discussed in the two reports produced by the fellows at the end of each of the placements.
The main priorities in the two communities are shown in Appendix 9, and the more detailed descriptions and the responding suggested recommendations in anonymised format can be seen in Appendix 10.

*Acknowledging the individual's needs as well as the population's needs:*

The fellows chose qualitative data collection methods to ensure an in-depth perspective of the individuals' perceptions of health needs in the community. In the selection of informants they aimed for a strategic selection, interviewing people who belonged to different groupings in the two communities. In this way, their data enabled the fellows to describe a wide spectrum of perceptions across the communities. The voting and prioritisation method that the fellows developed pulled together the perceptions of the community members. This method allowed the individual member of the community to anonymously "vote" for the importance of each of the health issues the fellows had found

in the data collection. It allowed the individual member to label as many health issues s(he) wanted to label in the three categories of "very important", "important" and "not important".

All of the fellows expressed that they were surprised about the top priorities of the two communities, and especially surprised that some of the health issues that they saw as extremely important as health professionals were voted quite a long way down the list. An example was that the Kenyan community voted girls health and gender inequality so low on the prioritisation list. In their report the fellows comment on this issue, followed by a list of recommendations (see Appendix 11):

> *"It is important to note that while this was not considered by the community representatives to be one of the "Very Important" issues, it does raise areas of concern for us as healthcare professionals and was raised again (by a member of the community) during the Community Feedback meeting. The issues relating to the girl child range from school attendance, early pregnancy, female circumcision, early marriage and menstrual hygiene problems.*
>
> *Recommendations*
>
> *1.5.2 Appropriate safe sex education and the use of condoms*
> *1.5.2. Improve school attendance by increasing the understanding of the importance of education amongst parents and community leaders.*
> *1.5.3 To explore ways of incorporating educational activity with domestic learning and duties*
> *1.5.4. Ensuring training (for boys and girls) and supplies to manage menstrual hygiene*
> *1.5.5 Empower girls to express their wishes and concerns about FGM and early marriage."*
>
> *(Fellows' report on the Kenyan community, February 2016)*

This work shows that although the point of departure for the work was the individual in the context of specific communities, the fellows still used their health professional insights to support the entire community. Using their gained understanding of the socio-cultural context as important for health, they kept the focus on the needs of the individual as well as the entire community population (see Appendix 11):

> *"1.9. Culture*
>
> *1.9.1 Culture is the way that we do things in our everyday life, usually in groups and it is usually the way groups are identified as different. Because it is everyday life it is often not*

*seen as special. In some cultures such as that of the [people in the Kenyan community] the differences are highly regarded and seen as normal and identifying behaviour. It is often difficult to identify from within cultural factors that result in ill health, and these factors are equally difficult to explore sensitively from the outside. However, it is important to do so for both the community and the health professionals to work together with a common aim and without prejudice to find common solutions. This is especially so in the current problem area of HIV, but equally so in topical areas such as getting a full educational experience and eating a well-balanced diet.*

*Recommendation*

*1.9.2 Ensure that all health related problem areas or initiatives are explored in a culturally sensitive way prior to implementing agreed interventions."*

*(Fellows' report on the Kenyan community, February 2016)*

Most of the fellows reflected on the differences between the expected findings from a health professional perspective and the actual findings in the communities. These reflections were expressed across the data in reflective notes, diaries or in the interviews. The core of these reflections was the need for the individual fellow to gain a new understanding of what they had found in the communities which in some way could be less contradictive to their professional understanding/rationale and previous praxis of delivering health care services. Their considerations and reflections were either an acceptance that the cultural expectations were different than the fellow's own expectations and perceptions, or they were ethical or humanitarian considerations on arguments such as the one that the WHO and UN have used for building campaigns for girls' education: "If you educate a man, you educate an individual, but if you educate a woman, you educate a nation." (Economic and Social Council, 2006):

*"Most of the problems being highlighted (in our health needs analysis) directly or indirectly involve a woman. I think that if a woman is empowered in relation to finances, nutrition, child care, then the whole community would flourish. However, empowering both male and female (could) be more sustainable than empowering (just) one gender" (Fellow, December 2015)*

*"Most surprising has been the attitudes of the community on wife sharing, polygamy, and gender inequality. After our session with the community on the issues, I was surprised how gender inequality was considered so unimportant by so many. This was along with the lack of*

*concern from the women group on the issue of FGM, something we find the idea of to be horrific. However they see it as part of growing up and to be celebrated." (Fellow, November 2015).*

4. **Have the fellows succeeded in suggesting sustainable and locally resourced solutions to the identified global health issue?**

The fellows did a resource mapping within both communities. After the prioritisation meeting in the two communities, the fellows addressed each of the health issues with recommendations developed together with the community members and leaders. In relation to the work in the Kenyan community the recommendations were presented to and discussed with the community members and leaders as well as the local health officials. As the time in the UK community was not sufficient to include as many of the community members as the fellows would have liked they set up a survey allowing anyone in the community to suggest solutions to the identified health issues.

The recommendations for the UK community were discussed with the locally responsible health officials who acknowledged that the community's recommendations were now in their hands as local leaders and that they would discuss them in a wider forum and subsequently communicate back to the community. The health officials emphasised that the community's voice is important, and that

> "*most of the suggestions are not necessarily cost expansions; they require putting people in touch of one another and helping each other to access available services" (minutes from the fellows' meeting with the health officials, March 2016).*

At this meeting with the UK community health officials, some of the community leaders were also present, explaining that

> *"...the community organisers were ready to work together towards maintaining the cohesion and development of the community..."* (minutes from the fellows' meeting with the health officials, March 2016).

and

> "...a link would be established between the (general practice surgeries), the schools, community groups and community organisers with an aim of creating a strategy and a platform for the coordination of activities pertaining handling each theme at a time. This will also create an opportunity to develop a ....locality community strategy." (minutes from the fellows' meeting with the health officials re the UK community, March 2016).

At the time of writing this report the GHEFP the fellows' description of the outcomes of their work with the UK community has been published in a community project newsletter, but no follow-up from the blog has occurred.

In Kenya, the locally responsible health officials asked the GHEFP fellows to develop recommendations based on their findings. Discussing the fellows' recommendations at a later meeting the responsible health official immediately promised to

> *"Provide a fridge for vaccine storage at the dispensary so the Community health professional can commence immunisations.*
>
> *Arrange for the (local) health professional to attend training in "Cold Chain education" prior to the vaccines being sent to [the Kenyan community]*
>
> *Furnish the health professional with a comprehensive Maternal & Child Health-Family Planning package and HIV test kits to improve access to this in the community.*
>
> *Apply for [the Kenyan community]'s Dispensary to be part of the supply chain for consumables.*
>
> *Formally link the Community health professional to [the local] Health Centre to access consumables for special cases (like the current patient with bedsores secondary to paraplegia), pending application for [the Kenyan community] consumables via the supply chain.*
>
> *Arrange a follow-up visit to the [funder of the building possible to develop as a hospital] in the company of the [leader of the] community at the earliest possibility.*
>
> *Set up a new community health group, supported by a presentation (for the regional health officials) on the findings of the programme. Health educated members of the community were agreed to be part of this group, and specific people from the community was suggested."*
>
> *(Notes from meeting between health officials, fellows and project leads re the Kenyan community, November 2015)*

Four months later, at the time of the writing of the evaluation report, the local health professional has started the training, completing some of the agreed courses. The fridge has been made available for the community, but the dispensary is still functioning as a home for

a group of people who have nowhere else to live, and although the electricity poles are ready to get in place, electricity is still not available for the dispensary. The community leaders have accepted to buy essential drugs, and the health official, responsible for the Kenyan community, is in the process of sourcing for a hospital licence to enable the community to procure their own drugs in the future.
The locally responsible health officials have launched outreach HIV testing and there are plans to have the RRI (Rapid Results Initiative) soon because of the high number of reported HIV-infected who are not on treatment. The RRI is an approach that has been used in many settings in Kenya by several ministries, including the ministry of health. RRI aims to achieve results within a certain timeframe, often 100 days, while strengthening the health team's accountability and commitment to produce results. The team set up for this RRI is likely to include the local health professional, whom the fellows worked with in the Kenyan community.

Appendices 10 and 11 shows the fellows' recommendations for the two communities in relation to a short description of the themes identified.

In their recommendations, the fellows showed a broad and inclusive understanding of the origins of the global health issues they had identified in the two communities. This meant that the recommendations were reaching out for interdisciplinary, trans- and multi-professional, cross-cultural, political, social, health and financial initiatives. The recommendations reflected their gained understanding of the impact of different types of knowledge, practices, skills, local community projects and formal health and social services. It also showed the understanding of the importance of collaboration across not just community projects but also health and social services, policing, schools and other community institutions and organisations.

Focusing on suggestions that had inbuilt emphasis on understanding the character and impact of any of change in the different cultural settings directed the fellows into sustainable recommendations. As the UK health official noted (see an excerpt from meeting minutes above), a lot of the recommendations were possible within the existing local

resources. Some of the recommendations would, however, demand new and extra political and financial resourcing.

Within the already existing resources were recommendations like “Incorporate the concept of the Capability Approach into the formal and informal educational programmes”.

In relation to gender inequality, it is likely that some of the Kenyan community leaders and stakeholders could prioritise within an already existing budget the *“process of exploring the problem of recognition of gender inequality and the positive effects to the community when these problems are identified and managed, for instance, education access and completion”*. *“Complete and staff the Girls Refuge Centre and explore how to integrate it into the local education system”* most likely would, however, demand funding not yet allocated and provided in any budget.

5. **Have the practical circumstances been optimal with good and supporting recruitment, sufficient correspondence and preparation for the programme with appropriate practical and academic support, to enable the described and derived outcomes, the fellows' learning throughout the programme, and ensuring the integration of stakeholders, culture and other contexts important to the programme's success.**

*The recruitment of the fellows*

In the UK, there were two applicants for the two fellowships, one from the Health Education East Midlands, and one from Health Education East of England. The advert for the programme can be seen in Appendix 1. After the recruitment of the two UK fellows, it was not possible to arrange a meeting with all the project leads and the two UK fellows, but the programme content including all practical details was discussed at a meeting with the three project leads and one of the UK fellows a month before the programme started. The other UK fellow met with one of the project leads separately to get the same information.

In Kenya, there were five applicants, encouraged to apply for this opportunity by the Head of the Department (HoD) of Family Medicine, Eldoret, Moi University, Kenya. All Kenyan candidates were interviewed in July 2015 by two of the project leads and the HoD Family Medicine. After the interviews the two project leads gave feedback to all the applicants, and had a session with the two successful candidates, explaining the content of the programme, including the practical, financial, logistical and social arrangements in the programme.

All appointed applicants were perceived as motivated, engaged and capable of succeeding in this programme. One of the Kenyan FDs, however, dropped out of the programme after six weeks, mainly because of the county's expectations of delivery of clinical services, but also because of private social responsibilities and expectations. After advertising for a replacement fellow from the wider teams' professional networks, we had three applicants

who were all interviewed in October by two of the project leads. The programme was described in the same details as during the original recruitment round.

It was a surprise to all project leads and supervisors that a Kenyan fellow dropped out of the programme, and in retrospect, we should have ensured that practical issues like permission of leave during the programme were guaranteed. It was not easy for the group of fellows to lose a member of the group, and it took a lot of energy and time for the new fellow as well as for the other fellows to establish the new group. This was felt by all project leads and supervisors:

> *"There was a lot more facilitation to do for me as a facilitator than I had expected…Group dynamics took up a lot of time, … I have handled many groups before, so not unexpected, but it has taken a lot of their time with this group. I told them about Tuckman's group development stages …and they were really ready to learn, and they asked a lot of questions, so I think they will get through the challenges…. There were also something about cultural differences in the expectations of how to work, how many hours to work during the day, … and on top of this ….differences in faith and practices of religion, and I could see that this was really difficult for them...." (Supervisor, November 2015).*

*The preparation for and start of the programme (correspondence and practical and academic support)*

Before starting the programme, there was mainly email communication between the project leads and the fellows. Practical issues like vaccinations, Visa requirements, financial subsidies, board and lodging and transport arrangements were discussed.

Both UK fellows and two of the project leads located to Kenya on September 19th, the third project lead joined the team September 21st.

An important part of the preparation for the work in the programme was the induction programme planned for the fellows immediately before the start of the work in the two communities.

Originally the programme had been planned to start 1st of September 2015. In July 2015 the project leads were informed that the final exams of the Kenyan fellows were likely to be

placed in the last week of August, so we changed the plan to a September 4th start. August 8th we were then informed that the exams would be held in the second week of September, so we moved the starting date to September 18th. We got funding for all fellows and project leads to participate in the first global patient centred medicine conference in Kenyatta, September 29th till October 2nd, and changed the timing of the induction programme to 19th -28th of September. On the 21st of August Moi University changed the exam dates again to September 20th to 25th. At that time all flight tickets were bought, accommodation for the induction period was booked and all activities were paid for. The consequence was that only the UK fellows had a full induction programme, the Kenyan Fellows only attending two days of the planned teaching in the induction period. All the fellows and project leads attended the conference, and the planned safari was attended by the entire group, apart from the Kenyan fellow who dropped out of the programme.

The fact that only the UK fellows attended the entire induction programme gave an uneven start to the programme. Seen from the project leads' perspective, it was worrying and an important learning point:

> *"We anticipated the potential disruption due to Kenyan timetables but I didn't foresee the difficulties of securing the release to the Fellowship. We need to reflect on how we can be more sure of this in the future."(Project lead, October 2015).*

It was equally difficult for the fellows to overcome the problems that occurred when one fellow started six weeks into the programme.

*The induction programmes for the fellows before starting their work in the two communities*

The induction programmes are described in Appendix 3.

The Kenyan induction programme was mainly based on the project leads' teaching sessions and presentations by external resource persons. The external resource persons presented their research or community development work within Kenyan health issues. These talks covered nutrition, newborn child and maternal health, HIV and contraception/family

planning. Two of these speakers were the local Kenyan supervisors who in this way were given a chance to meet the (UK) fellows before the start of the work in the Kenyan community.

The local supervisors saw this introduction to the fellows and the programme as a useful possibility for them to understand and shape their role in the programme:

> *"The induction programme was very useful because we were able to meet each other. I got to share my previous research work with the residents which was lovely as was their feedback. I think it also gave us an opportunity fully to understand each person's role in the programme. For me, it provided clarity on what my role as a supervisor would be and I got a feel of the expectations of the residents. For example, I thought I would have to do ward rounds, etc. but discovered that even the centre visits were all pegged on what specifically the residents felt was important for them to learn." (Supervisor, October 2015)*

> *"...things seem to go according to plan, despite a few earlier hitches. I also feel so because I have had the chance to have actual interaction with the fellows and other team members of the programme and thus to make it more tangible. Last but not least I feel so because I have had the opportunity of doing my presentation to the GHEP team which created a lot of positive debate of issues and I felt I had contributed to the main agenda of the programme....The trip down to [the Kenyan community] and the stay at xx guest house offered one of those perfect opportunities to have a more social interaction." (Supervisor, October 2015)*

Originally we had planned that the Kenyan fellows should introduce the Kenyan health care system, the history of Kenya and the community development work they had conducted as part of their Master's in Family medicine, but because of the absence of the Kenyan fellows only, the latter was possible. Instead, we prioritised the time the four fellows had together for the absolute necessary theory and some team building exercises. One of the project leads felt that the theoretical part had been too extensive, another was worried about the absence of the Kenyan fellows:

> *"The programme engendered a range of feelings from being inspirational, sometimes a sense of being overloaded to being tired especially at the end of the day. The inspiration came from the extremely high quality of teaching. I was introduced to new concepts that I can use in my own teaching practice. This included the sessions on qualitative research techniques which gave me a greater respect for this type of research. Being an activist, I enjoyed the exercises that got me out of the chair e.g. the theatre forum and role plays...At*

*times during the longer sessions, there was a sense of becoming overloaded with PowerPoint that led to feelings of tiredness." (Project lead, October 2015)*

*"(The induction programme was) disturbed but effective in the major areas. One member of the core team missed most of the work. Also... it was a disruption with the Kenyan fellows coming and going." (Project lead, October 2015)*

The fellows found the Kenyan induction programme useful, but also regrettable that the practical circumstances had not allowed the Kenyan fellows to take part in the (entire) induction programme. They also suggested as an improvement for similar future programmes that more time is used for theory about group dynamics and conflict resolution. These were issues that were taken up in several ad hoc teaching sessions throughout the programme:

*"Induction in Kenya was a fantastic introduction to the country, the health care system and qualitative research." (Fellow, March 2016)*

*"Induction....was comprehensive though interrupted by unavoidable circumstances such as exams for the Kenyan fellows and a scientific conference. It would have been useful to include group dynamics, leadership and learning styles in the induction."(Fellow, March 2016)*

*"The induction programme in Kenya was extremely useful because it set the stage and equipped us with the tools and skills we needed for the task ahead. We were introduced to fundamental and important concepts in terms of Global Health. It also introduced us to the Kenyan Health System as we learnt about and discussed context specific research, which was very useful. Furthermore, it gave us (the fellows) an opportunity to get to know each other before the actual data collection began. Unfortunately, our Kenyan colleagues were unable to attend from the start due to their final exams.....Each time I read the materials that were used during the induction period in Kenya I always find something new." (Fellow, March 2016)*

The induction programme just before the start of the work with the UK community took place in the general practice surgery that was functioning as the work base for the fellows throughout the UK placement.

This induction programme followed the principles of induction for UK GP trainees starting in a new placement. The fellows were introduced to the staff in the surgery by giving a

presentation on their work in the Kenyan community. They were given sessions on health and safety while working in the UK;  the organisation of the UK health care system; the area historically, geographically, and culturally in relation to selected specific health and ethnicity issues; poverty and on group dynamics.

The Kenyan fellows also had two days of 'sitting in' on patients encounters in general practice with the UK educational supervisor and coordinator. The 'sitting in' was set up to allow the Kenyan fellows to experience the culture and traditions of health care delivery in the UK. The social programme included visits to many of the UK based members of the core team over the festive period, a Sherwood Forrest safari, a one day trip to tourist attractions in London, and a weekend in the Lake District.

The UK induction was different from the Kenyan induction: The fellows were halfway through the programme and they had at this time already developed the methodological tools they needed to do the health needs analysis in the UK community. It was also different in that all project leads were not present during the entire induction programme, and that the topics felt predominantly aimed at the Kenyan fellows, as the two UK fellows had already had similar inductions when they started their GP training periods.

> *"I guess (the UK induction programme) was most interesting for the Kenyan fellows, the UK guys have been through this, but also important to let them explore and develop at their own pace"(Project lead, December 2015)*

At the end of the programme the fellows suggested that the UK induction would benefit from a more systematic and more comprehensive induction programme to enable them to enter the UK community:

> *"Induction in the UK was different, in that we had already worked through the methodology in Kenya, so it was moving to a new location. The surgery staff was incredibly welcoming." (Fellow, March 2016)*

> *"It was not easy to find our way into [the UK community]. All social means to well-being were well taken care of, and interacting with people from different parts of the world made us able to view life in a wider perspective, but it was not easy to see our way.." (Fellow, March 2016)*

> *"Induction: There was some consistency - it was clear what to do and what not to. But I felt that the host practice was not aware of the project and it took some time to warm up to it." (Fellow, March 2016)*

Seen in retrospect, we could have encouraged the UK fellows to take over the introduction to topics that they were confident in, and we could have considered an induction content that would have expanded the knowledge and skills of the UK fellows too. Apart from more structure, and perhaps more formality in the UK induction programme, the fellows had no other suggestions to improve the content.

> *"The UK half of the project did not have a formal "induction" programme similar to Kenya. However, we had some of the teachings later (including a session on the origins/history of the NHS), and our Kenyan colleagues had the opportunity to sit-in on a few consultations." (Fellow, March 2016)*

> *"Putting myself in the shoes of my Kenyan colleagues, and also juxtaposed against the "intensive" induction [in Kenya], I wonder if it would have been helpful to have a more structured schedule for orientation including a talk about the NHS, General Practice in the UK, etc. before we were formally introduced to the Practice?" (Fellow, December 2015)*

*Appropriate practical and academic support, to enable the described and derived outcomes, the fellows' learning throughout the programme*

<u>Practical support</u>

It was a challenge to find the right accommodation for the fellows. While working in the communities the fellows needed to stay relatively close to the community, but health and safety, basic hygiene and a proper diet were equally important. What we had not foreseen was the social and personal need for continuous good internet connection for work as well for personal and private use. All of these issues caused considerable distraction from the work in the Kenyan community for the first four weeks. The camp we had expected to be able to deliver appropriate accommodation had problems with bedbugs, hygiene and proper food and the internet connection was at best slow. These issues were described in

many interviews, surveys and reflective notes from the fellows, and we had telephone or Skype conversations daily or weekly until these issues were resolved.

> *"My worry is more related to the accommodation. I can usually cope with most adverse things, however in combination; leaking toilets/cold showers/poor hygiene/bed bugs/poor food/limited internet preventing talking to relatives and access to resources, has caused a drop in moral within the group. Although I am now trying to tackle the bugs, and (one of the fellows) has taken over some of the cooking, it is a distraction from our project aim." (Fellow, October 2015).*

The solution was to move all the fellows to a hotel in the nearest town from where there was an easy commute to a cafe with very good internet and higher quality food. The move was an unforeseen financial post that almost overthrew the budget, but it gave the fellows an environment they felt they could work in and with.

Interestingly accommodation in the UK community was also a challenge. One of the UK fellows lived locally and could, therefore, stay at home, but the three other fellows needed accommodation with the same criteria as in the Kenyan community: Relatively close to the community, proper health and safety, basic hygiene, access to a proper diet and a continuous good internet connection. In the UK community itself it was not possible to find appropriate accommodation:

> *"The only thing that I found difficult was .....in the very beginning just trying to find them accommodation.... the initial information was to have them sort of based in the area and that would be a difficult thing to do because number 1, it was difficult to find suitable accommodation, and in all fairness, to get the tenancy to be the right amount of time because they are usually (at least 6 months), but it to be appropriate (was) really the problem… there weren't any furnished accommodation, and then they really didn't do the three months, so there was no flexibility there...obviously, there were properties I didn't look into, not places I would have gone to, to be honest... just I don't know if I would say hygiene, just probably just the standard I would say… "*
> *I: Were there issues with electricity or water?*
> *"Oh, no that was all there… "*
> *I: so who would live there?*
> *"I'm not sure."*
> *I: Would anyone working in this surgery live in those places?*
> *"Oh, no… but perhaps some of our patients.. I don't know… perhaps I was just assuming too*

*much… but it was actually something I thought a lot about!" (Local health professional, March 2016)*

For better accommodation close by it was not possible to rent accommodation for such a short period, and the available short-term rentals were not within our budget. In the end, the solution was to rent a house owned by a family member of one of the project leads, with a driving distance of 30-45 minutes. The fellows were given a subsidy for food and were cooking their food and agreed to this solution, although living closely together during work time and free time, and largely being dependent on each other for transport to and from the community was also a challenge.

*"Prior to embarking on this fellowship, I considered myself a good team player. Therefore, I have been very surprised by how challenging I have (sometimes) found it working with the team. And the fact that this was unexpected made it more difficult to accept and manage initially. Upon reflections, I recalled the "on-stage and off-stage" concept and realised that with work colleagues, there was (normally) more "downtime" as opposed to constantly being in each other's company here - including meal times, weekends and for most recreational activities. Perhaps I had not adequately prepared myself mentally for this aspect of the project? One thing that did help improve the situation for me was not having to share rooms." (Fellow, November 2015)*

Academic support

Throughout the programme, the project leads offered regular academic, professional and educational supervision, including ad hoc teaching sessions, workshops and seminars. The regular surveys, interviews, diaries and reflective notes helped to flag up any upcoming or urgent need for support. Emails and the Whatsapp group was also used to keep a continuous contact within the core and the wider team. A few times during the programme the project leads felt that the fellows had left it too long before contacting us, on the other hand, was it important that the fellows were self-directed in their learning.

The Kenyan supervisors had Skype meetings or face to face meetings with the fellows on a regular basis discussing the progress and challenges in their work with the community.

> *"I did not come with a prescription of how to work but allowed them to tell me how I could chip in….I have met them two times on the phone and one time physically … beginning, midway and then yesterday, and then in between we have had emails and many phone calls, 7-10 times, almost every week, oh yes, and then the Whatsapp of course… they have been good in contacting me when they needed help." (Supervisor, November 2015)*

For the UK educational supervision the strategy was to allow the fellows time to discuss any professional and personal issues, focussing on the project as well as the relationships within the fellows' group, and after that to have a formal session either given by the educational supervisor or one of the fellows. The content of these formal sessions was the structure of the NHS; consultation skills as taught to GP trainees in the UK; writing of condolence letters, focusing on the patient-doctor relationship; and finally another session on the team working problems. The educational supervision also included pastoral and social support.

The evaluation model allowed frequent contact and immediate facilitative response to challenges that the fellows did not feel they could manage themselves.

At the end of the programme I asked all the fellows in the interviews and the survey, if they felt that the core team had succeeded to respond and react to the needs that they had expressed in the previous interviews, the reflective pieces and surveys, and if this had enabled immediate change and tailored support for the fellows and the programme as such. It was the overall feeling that this had happened.

> *"Yes. The lessons of group dynamics somehow to bring people together. Prompt email replies to our questions. The evaluation process offered us an equal chance for all of us to participate and an equal chance to speak out our views." (Fellow, March 2016)*

> *"You supervisors were available for our consultation each time we got stuck." (Fellow, March 2016)*

> *"Educational supervision (UK and Kenya) was extremely useful, very supportive in terms of work planning (day-to-day) and strategic thinking." (Fellow, March 2016)*

One of the fellows suggested that the UK part of the programme should include local supervisors who were a part of the programme like the arrangement had been in Kenya:

> *"Educational supervision (in the UK): It was supportive but it would have been richer to have facilitators from an affiliated university/ department familiar with the objectives of the programme for consistency of curriculum and mentorship."(Fellow, March 2016)*

The ad hoc teaching sessions were also seen as valuable support in the programme:

> *"The writing seminar was really invaluable to me, having no previous writing experience!" (Fellow, March 2016)*

> *"The extra teaching you have provided have been extremely helpful to our work in the group… I am thinking of, for instance, the one about poverty, and understanding of complexity related to health, and… the reading and writing sessions, they have really lifted me to feel that this is also something I can do…" (Fellow, March 2016)*

*Enable the described and derived outcomes, the fellows' learning throughout the programme*

The evaluation model was chosen to support the facilitation of the fellows' learning throughout the programme. The possibility to make time out, ask for help and ad hoc meetings or specific teaching sessions was particularly effective in relation to the academic work, but also in relation to the other challenges they had.

One of their challenges throughout the programme was working together as a group of health professionals with very different socio-cultural-religious-educational backgrounds, including different traditions for more or less flat hierarchies.
There were several group melt-down episodes during the programme, but everyone engaged actively in the facilitative workshops we set up as a response to their request for help. As project leads, we had erroneously anticipated that fellows at this stage of their professional lives would have sufficient knowledge and experiences in group work that could carry them through any storming phase at a professional level. It was an important lesson for us as project leads and for the fellows.

> *"I feel the evaluation process and the intervention process of resolving our conflict as fellows has contributed a lot to our current relation to each other. I feel encouraged to continue being part of the group." (Fellow, November 2015)*

*"I am living and working with people of different culture, race, profession, nationality…It takes a lot of effort to be a member of a team and make to achieve the goal of that group....Take a football game, for it to be successful the playground has to be prepared, the player items have to be ready, the players themselves should be prepared, their coaches. It takes a lot of evaluation and ensuring that practicability applies such that each of the responsible people for any particular activity know why, how and to come to play." (Fellow, January 2015)*

*"Teamwork, teamwork. When the storms arise, the ground is too hot, an option of quitting the game is too strong to ignore, but the movie of life continues. That was one episode done, not the end of the series. More to watch, more to learn is coming! The main goal of this learning!! My goal teamwork, problem-solving, how to position self during crisis without taking sides, coping skills, non-judgmental skills, use of common sense, use of common senses……This is the best film I have ever watched, and at the same time involved as an actor. It makes me smile at a time alone!" (Fellow, February 2016)*

At the end of the programme all the fellows expressed that they had grown in many ways, one of the more important being the way they solve problems and work in a group:

*"In terms of group dynamics, I had naively envisaged a scenario where we would all be "best friends" by the end of our six months. I did not expect us to be almost perpetually stuck in the "storming" phase, and this is a scenario that I personally find very sad. ... (When that is said) I have gained so much personal development in terms of maturity, team working, leadership and problem-solving skills. I have grown my capacity to handle challenges both personal and professional. I have learnt from my colleagues, from our supervisors and well, from actually doing." (Fellow, March 2016)*

*"... Improvement of Teamwork skills; the ability to keep the focus on the goal of this project and ensuring we incorporate the weaknesses and strengths of each other ,glueing that together to make a common ground has enhanced my ability to work in similar or more challenging teams in future. "(Fellow, March 2016)*

*Ensure the integration of stakeholders, culture and other contexts important to the programme's success.*

Integration of stakeholders, culture and other contexts

Apart from the induction programme's teaching sessions, the patient-centred conference and the safari, the project leads also introduced the fellows to a few community leaders who had agreed to help with the further networking. In Kenya this happened during a visit to the Kenyan community, introducing the fellows to important community leaders, health officials and the local health professionals. In the UK surgery one of the stakeholders had volunteered to help with creating contact to important stakeholders in the community:

> *"... when I have been doing my daily routine I have ... had it at the back of my head, seeing an email from someone thinking, oh, that might be interesting for them (the fellows) to get that contact or for them to go there, or if I have been driving past somewhere where I thought it would be good for them to be introduced , Oh I could pop in there and introduce them, tell a little about the project... it has sort of been on my mind all the time, and I think... they have succeeded well to get into the community...I have been like appointed as an email contact, or if (the fellows) wanted to pop in..." (Local health professional, March 2016)*

The introduction to the culture was mainly done by the core team and wider team visiting the community, offering the social programme and some teaching sessions focusing on the cultural aspects of life in the communities. The social programme in Kenya included a visit to relevant historically important sites and a 2½ day safari where mornings and evenings were used for focused forum theatre to prepare the fellows to work as a team, supporting each other.

The UK social programme included visits to many of the UK based members of the core team over the festive period, and with one of the project leads or the fellows on their own; a Sherwood Forrest safari, a one day trip to tourist attractions in London, and a weekend in the Lake District.

The fellows all appreciated the social programme both as an introduction to the culture, but also as a way to bond or strengthen the relationships within the group of fellows:

> *"The safari was an incredible experience, and a good opportunity to get to know other fellows and supervisors. Thank you!" (Fellow, March 2016)*

*"The Social Programme in Kenya was very useful as a team building exercise." (Fellow, March 2016)*

*"It was good to be able to explore London with the Kenyan fellows." (Fellow, March 2016)*

### *The empowerment evaluation of the programme's impact on the fellows' development and the communities that the fellows worked with*

The aim of the programme was to allow the fellows to be supported, but self-directed in their work during the programme. Through the use of the dynamic and responsive evaluation model, we did not know if it would be possible for the fellows within such a short time to learn how to use the principles of empowerment evaluation, let alone apply these principles to their work. As the basic evaluation shows, the fellows not only engaged in the application of the ten principles to their own development within the programme, they also transferred the principles from their development within the team and applied all ten principles of empowerment evaluation to the work they were doing in the communities. During the induction teaching programme we suggested the following definition of a community health analysis, and reviewing their work, this definition exactly describes what the fellows did in both the Kenyan and the UK community:

> ***A community health needs analysis,*** *is a systematic approach to improve the health of the community population most efficiently by evaluating the available health services and advantages/opportunities/strengths in the search for possible solutions to problems/deficits/weaknesses in the community.*

Below I illustrate how the GHEFP fellows engaged fully in the empowerment evaluation model.

**The three step process of the empowerment evaluation model included**

1. Establishing their mission or purpose.
2. Assess their current resources and needs as "the current baseline".
3. Plan the next steps in their work, i.e. specifying goals, strategies to achieve goals and getting credible evidence.

In empowerment evaluation, the participation of all involved is not demanded but invited and encouraged to allow examination of issues openly within the entire team of participants, facilitators and others involved in the programme.

The ten principles of empowerment evaluation were all applied both at the level of the GHEFP fellows' development AND at the level of the fellows' work with the two communities:

1. Improvement
2. Community ownership
3. Inclusion
4. Democratic participation
5. Social Justice
6. Community knowledge
7. Evidence-based strategies
8. Capacity building
9. Organisational learning
10. Accountability

Below is a description of the content of the three steps of the empowerment evaluation and how the ten principles for this model were applied during the GHEFP. An overview can also be gained in Appendix 6.

The three stages were applied cyclically so that every part of the work built on previous work, experiences and insights. This allowed the running of the programme to be a process, where the fellows could ask for support at any stage, and where they could integrate their

learning at any stage, to optimise the outcome of their own progress as well as the progress of their work with the communities.

1. *Establishing their mission or purpose.*

The first (Kenyan) induction programme was set up to give the fellows a starting point regarding theoretical and methodological needs, and a sense of the curriculum we as the project leads had suggested. The content of the induction programme can be seen in Appendix 3 and supported by Appendix 4 where some of the mind maps used to define the area can be found. The fact that the Kenyan fellows attended little or none of this induction gave challenges in the first rounds of the process:

> *"Induction should really be compulsive…When I met with the fellows the first time, I realised that the Kenyan fellows didn't have a clue about the expectations of the programme… A lot of the information at the induction meeting was lost because of the changed programme. And actually… Not just the Kenyan fellows but also we as the Kenyan supervisors … missed out on important information". (Supervisor, November 2015)*

Despite the attempts to update the Kenyan fellows on materials through the use of a shared Dropbox, some information was lost throughout the programme, i.e. that there was a suggested curriculum available for the fellows:

> *"I would suggest that it remains a problem-based exercise but have a form of a standard curriculum to demarcate the scope of learning and guide the achievement of the objectives". (Fellow, March 2016)*

As described under basic evaluation question 5 the project leads and supervisors were available and in continuous contact with the fellows, giving ad hoc supervision and needs based teaching sessions, seminars, workshops and other kinds of support needed for their progress.

At the end of the Kenyan induction programme, the fellows made their first plan for how to approach the Kenyan community, which strategy and methods to use. Using the snowballing method (Spenzer et al., 2003) for selection of informants, the fellows built onto their work in cycles of data collection, analysis, strategy and new data collection within the topics and the groups they had identified as needed to complete the health needs analysis (Sleezer et al., 2014). During the fellows' work in the Kenyan community, they developed a strategy and a prioritisation method which they used and adapted to the UK community later in the programme.

*2. Assess their current resources and needs as "the current baseline".*

The evaluation meetings were set up to allow the core team to know what the current baseline was, and what the resources and needs were. Before each meeting, there was a survey to allow reflection start previous to the meeting, and to alert the supervisors and project leads if major steps or initiatives were needed. The teamwork and academic writing skills were some of the major and recurrent issues. From a financial perspective, there were also frequent assessments, i.e. to see if the budget could accommodate the need for resources to feed people from the community at meetings with the fellows. An agenda would be sent out before the meetings, including the fellows' progress and the topics that had been flagged up by the members of the team:

> *Agenda*
>
> *Progress in programme, (update from the fellows, max 20 min including questions)*
>
> *Community Prioritisation/voting ideas and logistics, (short outline from the fellows max 5 min outline + 15 min discussion)*
>
> *Choice of writing style for final report(s). Tips and guidelines. Any examples to refer to? (Ideas and suggestions from (project leads) max 20 min discussion)*
>
> *Academic output from the programme ((project lead) to introduce max 5 min + 10 min for discussion)*
>
> *Funding for cultural activities e.g. weekend / Trip to London? (Short outline from (project lead) max 5 min + 10 min discussion)*

*Dates for the next evaluation meeting & interviews & survey monkey*

*AOB*

*(Evaluation meeting agenda, January 2016)*

The fellows lived closely together throughout the six months of the programme, challenging their interpersonal relationships and team working skills, but it also allowed them to discuss progress and assess their combined resources for problem-solving in their work with the programme as well as with the community.

One of the challenges where the fellows supported each other in a united and agreed assessment was when there were problems with the accommodation in the Kenyan community. In this situation, the fellows created a list of issues and alternative possibilities After their assessment of the situation they visited alternative accommodations, and asked for telephone meetings with the project leads in which the possible solutions were discussed, and the plan was agreed:

> *"Bed bugs everywhere, low hygiene, bad plumbing, no internet, limited electricity/fuel storages, poor food, no hot water, low security…. We discussed all of it… really don't want to leave, but it is too much…. We have now visited a possible hotel where we can stay,… had a long discussion about it… decided that we will suggest this to the project leads…." (Fellow, October 2015)*

During their work in the UK community, the fellows were struggling to achieve access to a particular group in the community. Through discussions of possible resource people and potential meeting places for this part of the community they gained access at the very end of the programme:

> *"….we didn't think of this before very late… In (the Kenyan community) it was the school that included everyone, all the different groupings had some connection to the school… in (the UK community) it was the youth centre… and this is where we could get access to the .. group as well….we just didn't think of it before now!" (Fellow, March 2016)*

*3. Plan the next steps in their work, i.e. specifying goals, strategies to achieve goals and getting credible evidence.*

The cyclical process allowed the programme to move forward both for the fellows' progress in learning and achieving the expected outcomes and in the fellows' work with the two communities. Appendix 4d shows an illustration of the planning that the fellows undertook for their work after their first visit to the Kenyan community. Throughout their work in the programme, the fellows would plan how to progress their work with the communities, specifying goals, distributing the work and reviewing the incoming data and insights to progress the work in the community. In parallel, they communicated to the supervisors and the project leads what kind of support they needed to achieve the expected outcomes, and together with supervisors and project leads they set goals and made strategies to achieve these goals.

**The ten principles of empowerment evaluation**

The ten principles of empowerment evaluation were all applied both at the level of the GHEFP fellows' development AND at the level of the fellows' work with the two communities. In Appendix 6 the application of the ten principles is outlined for both levels. In the basic evaluation above, it has already been described how the ten principles were applied to the level of supporting the fellows to progress. Below I have therefore only gone into details on how the fellows functioned as the empowerment facilitators in the two communities. The principle characteristics according to Fetterman (Fetterman, 2015) is described in italics at the beginning of the section for each of the ten principles:

1. *Improvement*

*Helping people improve performance. Help people build on their successes and re-evaluate areas meriting attention* (Fetterman, 2015).

The fellows identified perceived health themes in the communities through qualitative methodology and subsequently developed a method to allow the members of the community to prioritise their needs and make recommendations for ways forward.

In an evaluation interview with one of the community leaders who had taken part in the prioritisation meeting in the Kenyan community, I asked if the GHEFP had had any impact on the community:

> *"….the (health) issues (the fellows had identified) are there, I know that. When a doctor finds out that you are ill and need to go to the hospital he finds your ailment and give you the education I know we can hide (the health issues), but (the fellows) have achieved better… The most important we wanted to achieve was that knowledge so that we can prevent some of the diseases we meet…*
>
> *(The community) has many bad days (due to illness), (so) there is a lot of help in getting the enlightenment. (Hosting) this project people understand more now. I have had a lot of problems; I used to take people to the hospital, and I now look around and see the value of friends to the community, the support for the parents in the community. I have seen groups come around from Nairobi, giving medicine and talking with the community about the ailments,… then they go fast again, but through the enlightenment (from the fellows) the people of this community will now see, and the (fellows) have been around the school here, even the schools up there, and talked with all people.*
>
> *Yes it is worth it, (worth) is not (always) about money, those (fellows), they have been vessels to us like carrying water they have carried knowledge, and (they have taught) the people of [the Kenyan community] to find health…They have given knowledge so that people can find health, not medicine to heal, but knowledge to understand, so I am very satisfied with (this programme), I am happy, it has had a big value for this community, not money, value!. We wish this programme to continue and till you come (again) we will use the knowledge the doctors have given us to best find our health...." (Community leader, November 2015).*

Improvement in the Kenyan community was not just the promised better access to health care because of a promised fridge and the promise of an equipped dispensary with vaccines and medicines. For this community leader, the improvement was also the health education the fellows had given, new knowledge and understanding their health in a way that was not just about getting medicine if they fell ill. Health was also something they could influence through the knowledge they had gained. Another community leader from the Kenyan

community was happy with the community priorities, but also stated the mindset for further improvement:

> *"If the doctors saw something they did not find good, they should tell the community, so that they can learn from them, think about it, and know what to learn about in the future" (Community leader, November 2015).*

The improvement in the UK community the improvement was different. The fellows also taught in this community, i.e. how to contact the health care system in different situations, who and where to call in an emergency. The groups that the fellows had taught were all very grateful, but somehow the UK community was much more compartmentalised, and therefore much more difficult to reach and estimate whether the work had resulted in improvement.

***2.*** *Community ownership*

*Valuing and facilitating community control; use and sustainability dependent on a sense of ownership* (Fetterman, 2015).

The method for identification of themes and the engaging prioritisation method allowed the wider community to decide the content and priorities of the work to come, and to continue the work within the community after the fellows had left. In their report on the work with the UK community they explain how they achieved community ownership to the process in the UK community:

> *"The [UK community] health needs assessment was conducted immediately after a similar exercise in [the Kenyan community]. Unlike the situation we encountered during the [the Kenyan community] placement, there is a plethora of data for the (this area). However, the numbers do not explain "the why" and cannot provide an in-depth understanding of community perceptions which is essential to foster ownership and enhance the sustainability of community interventions. [The UK community] has access to several GP surgeries and various community projects; however uptake of a number of these services is less than optimal. By exploring and gaining a better understanding of the reasons underlying health seeking behaviour; community perception of health needs; and subsequently giving [the UK community] a "voice" to prioritise their these needs through the voting exercise; we*

*will provide local healthcare providers, local authorities and community organisers with a tool for planning and delivering the most effective care to those in greatest need.*

*The community's proposed solutions were incorporated and communicated the in our recommendations, which we hope will enhance ownership of proposed interventions and improve uptake of available services."(Fellows report, March 2016)*

***3.*** *Inclusion*

*Invites involvement, participation and diversity; contributions come from all levels and walks of life* (Fetterman, 2015).

The fellows collected data about health issues as widely distributed as possible in both communities, valuing the ordinary member of the community as well as the community leads and responsible health officials. They made a huge effort to include all the different groupings in the communities, especially in the UK community where the compartmentalization was so obvious, but also in the Kenyan community the population and the community leaders had noticed how far the fellows reached out:

*"They educated the children and the parents in local school,… they (travelled) to the furthest away part of the community and they taught them also out there. So we consider them (to have this community) as their home. (They went to) the women's group, they also took photos of the community, all the groups needed to know about the diseases, also those that are due to the weather…I am very happy, because the doctors got people to talk how life is to them in the community, and the person who come forward to tell about his concerns this is an important task, because it takes a lot for any person to come and talk about concerns , and we discussed all that was brought forward, and when something is taken forward it is on its way to completion, all with the help of God". (Community leader, November 2015)*

In the fellows' report from this community, they described their strategy to do resource mapping in the community. They state how "the mapping of resources within the community is an important element in framing this analysis with the capability approach". They describe the community in terms of community strengths and resources; culture richness, togetherness, world connection and leadership. They include health care facilities, human capital, the education system, health support income generation activities and

community special skills. Also included are transport and communication channels; social organisations; residents association resources; health support organisations; groups and partnerships; food and water sources; security and administrative resources; and upcoming resource opportunities. For the social organisations and residents' association resources they describe the groups they have engaged with:

> *"…There are various groups and organisations in the community which include: a social support group for the women, popularly known as "merry-go-round", women prayer groups, Quarry Management Committee, [in the Kenyan community] Development Committee, Water maintenance committee, School teachers and parents board, ... youth groups, and ... women self-help groups. There are (also) more than five different church denominations in [the Kenyan community]." (Report from the Kenyan community)*

In the report for the UK community, it was different groups, and the access to the different groups of people was done with a different strategy. The groups were not meeting as groups but were more or less frequently attending specific sites or events. Collecting data at the different kinds of meetings, sites, and events the inclusiveness in the fellows' data collection was equally impressive. In their UK community report it says:

> *"[The UK community] is a melting pot of several cultures including British, Western and Eastern European including a large Roma population, Asian (predominantly Pakistani) and Afro-Caribbean....The potential strengths of the [UK] community lie in the diversity of its cultures, ethnic groups, languages, and religions....We were invited to be involved in some of the activities of interest groups. During the interactions with them, we were able to make first-hand observations and gain helpful insights into issues of unique concern to them as well as issues of general concern that we had met before. The sites we had access to for participant observation were: (a) youth club..., (a) community Kitchen at the ...church, ...XX College (for (an) English class),... Role play (about First Aid), NHS emergency services Foodbank ...., (a) day care (centre), ....and the Light Night Festival". (UK community report, March 2016).*

4. *Democratic participation*

*Participation and decision making should be open and fair* (Fetterman, 2015).

The voting method was done in collaboration with the community leaders, giving the community not just the results of the prioritisation exercise, but also illustrating a way to work with the community.

In the Kenyan community report from the fellows the democratic principle is explained:

> *"...Each stakeholder or group representative was given a set of ten cards; which were miniatures of the pictures on the posters mounted on the walls. These would serve as their voting cards during the prioritisation exercise. We had demonstrated the themes both with words and pictures because not all our representatives were literate. We then conducted a voting exercise during which we asked the individuals to prioritise each theme as to whether they felt they were Very important, important or not important. We had three boxes labelled with each of the categories… and voting was done by placing the card with the relevant theme/picture in the box of their choice. We allowed people to place as many voting cards as they felt necessary in each box...." (Fellows' report, February 2016).*

Although the GHEFP fellows were only a few months in each of the community, they used as many contacts as possible to network and meet as many people from as many different groups they could. Despite the short presence in the community, they managed to get a good representation of the groups in the community at the voting meetings. One of the community leads described the UK prioritisation meeting like this:

> *"…. I was there at the voting meeting, that was really popular...there were 130, 140 people, not too bad, it was good, really popular activity, and it got people to engage in different ways, covered a lot of ground, and the fellows told about the project when they were all there. They did it in a very simple way that could engage everyone, very simple, quite straight forward, you know they managed to explain to my son what it was about, he's four... pretty good representation from (all groups in the community), perhaps slightly less white British middle class than there is in [the UK community] maybe, but there were some, and from the churches as well, community leaders...a good mix....they got to the root cause of these issues you know... ". (Community leader, March 2016)*

Many of the UK community leaders told about 'listening exercises', a door to door questionnaire data collection about life in the community. The data of the 'listening in projects' were analysed and used to establish new initiatives, but these data were not used

in a process for decision making that could be described as democratic as the fellows' voting method.

***5.*** *Social Justice*

*Used to address social inequities in society* (Fetterman, 2015).

Through the capability approach, the fellows' focus was on health in relation to poverty, social deprivation and possible sustainable solutions within the available local resources. In the conclusion of the fellows' report from the UK community, they emphasised the impact of the learning they had gained participating in the GHEFP:

> *"The enriched understanding of health in the context of social justice, and knowledge of concepts like the capability approach and the complexity theory have equipped the fellows with transferable skills and valuable principles to incorporate in future endeavours to promote health locally as well as globally." (Fellows' report, March 2016)*

The impact of their learning is described in further detail below in the section on the added value of the GHEFP.

***6.*** *Community knowledge*

*Respects and values community knowledge* (Fetterman, 2015).

The use of qualitative methods and including as many community members, leaders and stakeholders as possible, the fellows based their entire work on community values and knowledge. It was often difficult for the fellows to set aside their own health professional perceptions, but they did it and worked with it when there were clashes in the group of fellows or between perceptions of the fellows' group and the communities. The community priorities were the health needs that the fellows also prioritised in their recommendations for the health officials (see Appendix 11), but the importance of the dilemma between the

community priorities being significantly different from some of the health professional perceptions was also described in the community reports that the fellows developed:

> *"...It is important to note that while (girls' health) was not considered by the community representatives to be one of the "Very Important" issues, it does raise areas of concern for us as healthcare professionals and (it) was raised again (by a member of the community) during the Community Feedback meeting. The issues relating to the girl child range from school attendance, early pregnancy, female circumcision, early marriage and menstrual hygiene problems." (Fellows' report, February 2016).*

***7.*** *Evidence-based strategies*

*Respects and uses the knowledge base of scholars (in conjunction with community knowledge)* (Fetterman, 2015).

The capability approach, definitions of global health, social deprivation and poverty and WHO's definition of social determinants (Solar and Irwin, 2010) all described above were used to steer the fellows' work in the community. In the background were the fellows' own perceptions of health issues and professional and personal values, but these were predominantly set aside to allow the values and perceptions of the community members and leaders to guide the development of the community work.

The fellows acknowledged qualitative data collection methods to map the community knowledge. The data describing the Kenyan community included:

> *"15 individual semi-structured interviews; with six pages of notes per interview*
>
> *Four focus group discussions; with approximately six pages of notes per discussion*
>
> *Two question and answer sessions; with a total of 20 questions from the girls discussed*
>
> *Approximately 300 hours of observation for each of the fellows*
>
> *Approximately 800 pages of hand written notes on the observations*
>
> *Approximately 500 photographs*
>
> *50 Antenatal care records from January to November 2015 [The Kenyan community]*
>
> *1835 Antenatal care records from April to October 2015*

*211 Delivery records from January to September 2015*

*74 Comprehensive Care Records from February to October 2015…"*

*(The fellows' report, February 2016)*

***8.*** *Capacity building*

*Designed to enhance stakeholder's ability to conduct an evaluation and to improve programme planning and implementation* (Fetterman, 2015).

The prioritisation and recommendations from the two communities were handed over by the fellows to the locally responsible health officials for their use in developing health strategies and initiatives together with the community members and leaders.

For the Kenyan community, the impact on the capacity building was quite clear, with a long list of promises immediately given to the fellows by the responsible health official (see basic evaluation question 4). For the work in the UK community it was however not so straight forward:

*"I think we knew… you had warned us that they probably wouldn't make promises, but... I mean it was really nice in Kenya when we got out of the meeting it was Yes! We got a good number of promises there, but here (in the UK community)? ….. it would have been good to have more to take back to the community when we feedback next week.*
*I mean… the presentation (to the locally responsible health authorities) went well; everyone was interested; the difficulty was what we were saying, … that education was number one (in the community prioritization)….  their schools had just been going from poor to outstanding in performance, so I think it was not really what they were expecting to hear, and (I understand the reaction)….. we had only been there for a few months, so how would WE know. … and they had recently cut funding for a preschool programme that was preparing the children for school difficulties in speech and language, …. so these were quite touchy issues.. But they listened, …. The problem is that it's okay for the people who have come up through the schooling system in the community, in those excellent schools, but with such a high turnover in the community, new people coming ALL the time, and they haven't gone to those schools, and they are in the community, right now, asking for education (to be prioritized).*

*Overall they said that they had got something to think about, they would be looking into some of the issues, (our idea with ) the child educator, educational counselling, Counselling the girls, sex education, poverty, … they said they would incorporate it into (a report)… but*

*they also said that they didn't want to make promises to the community, that they couldn't follow through, so they wanted to look at it again, apart from one thing… they would be happy to promise …to look at the access to the welfare offices".(Fellow, March 2016)*

Regarding capacity building in the Kenyan community the local health professional was being trained, the dispensary was being equipped, a fridge provided, medicines and vaccines, all out of the available local resources and to the level of planning and implementing better health care services. In the UK community, the capacity building was closer to the *preparation* level of the capacity building, giving the health officials there more data for evaluation as the fellows had made connections between different parts of the community. The fellows had been networking, and they had offered the locally responsible health officials data that showed another perspective on the community's perception of the most important health issues.

Some of the difference between the two places might have been because we as the project leads managed to engage the Kenyan health officials from before the programme, but that this didn't happen that early in relation to the UK community.

***9.*** *Organisational learning*

*Data should be used to evaluate new practices, inform decision making, implement programme practices. Used to help organisations learn from their experiences (success, mistakes, mid-course corrections)* (Fetterman, 2015).

The purpose of the data collection, the voting and prioritisation meetings with the community members in both the UK and Kenyan community was to allow development of solutions to health issues perceived as important in the community. All the data collected by the individual fellow was used to inform understandings, insights and next steps in their work with the communities. The challenges were shared with the stakeholders/community leads in the community on a continuous basis and the outcomes of the work (the identified

themes) were shared with the community first for prioritisation and secondly for the development of recommendations based on the community prioritisation.

As described in the basic evaluation the Kenyan health officials immediately used the insights provided by the fellows and saw the prioritisation list as a platform for a tailored health improving strategy for this particular community.

In the UK community, the locally responsible health officials also appreciated the fellows work in the community, but the level of regulation in relation to health service delivery seem to leave very little leeway to engage in local health needs analysis like the one the GHEFP provided. At the end of the programme, I asked one of the health professionals for the UK community, if there would be any way that they could use this list?

> *"Well yes, this is good because this is first-hand data, it is not the government telling us to do (something in general) it is for this particular community, it has local connectivity, the local people, this is what they want, and it is a nice concise list, but we have still got a hundred different other projects that we need to comply with, and we cannot say to the government, no this (GHEFP) is more important for us, but we can look at it and say, on a longer term this is what we will focus on... We would love to be able to say that to other people, this is what we want to do and do more of this, but unfortunately, we cannot do that because a lot of these schemes comes from (higher up) and there will always be that problem... it is also a financial decision from our point of view*
>
> *I: So are you saying it is a political choice, it needs to come from a political side?*
>
> *We have to be told to do it, or be given more incentive to do it, or all those other people need to be told to back off, leave us alone so that we can do (things like the list suggests), ... what we would like is to have control over our work priorities, but unfortunately, it is not for us to say yes or no to (the regulators)... It's between a rock and a hard place for us because it is... also a business, we have to make sure that the population here has access to the doctors, if we don't run the business well, we would have to close, and there would be no doctors to go to in this community." (Health professional, March 2016)*

***10.*** *Accountability*

*Outcomes and accountability. Functions within the contexts of existing policies, standards, measures of accountability; Did the programme or initiative accomplish its objectives?* (Fetterman, 2015).

The communities took an active part in the mapping of the community health issues, and the recommendations that were all sustainable and to a large extent within the available local resources. This work was based on accepted definitions of global health, poverty and social deprivation and capability approach. The communities benefitted from the work through the insights the GHEFP gave, but also because they were left with the reports to continue the work after the GHEFFP fellows had left the community.

The fellows delivered these reports as expected to the communities, community leaders, local health professionals and responsible health officials. The reports are confidential material for the two communities, but the identified themes and the recommendations have been anonymised and are described in Appendices 10 and 11.

# Added value of the programme

The GHEFP delivered all the outcomes and the process described in the project plan. Furthermore, there was added value for the fellows, the communities involved, the local health professionals whom the fellows worked with, for the supervisors, for the health officials responsible for the communities involved, and for the funding Health Education East Midlands.

### *Added value for the fellows*

When interviewed at the end of the programme all fellows described how their experiences in the GHEFP had changed their perspective of being health professionals both as clinicians and academic health professionals. What they had learned in the programme went far beyond the global heath perspective, and they all expected to implement this into their everyday clinical practice.

The training and confidence they had gained from the academic work were not just adding another line to their CVs, but changing their perceptions of themselves as potentially continuing research and other types of academic work:

> *"I would really like to do more (qualitative research), you know…not just accept all the (quantitative) data…., but be able to think much wider...so, I would love to do more research, seeing things that I am not happy with, I have so many patients with mental health (problems) and there are so many homeless where I work…. And now having a way to work out WHY that's been really amazing to learn... really exciting... ". (Fellow, March 2016)*

When asked what the most important learning points from their participation In the GHEFP were, the lists were long and the enthusiasm high:

> *"I feel I've developed a real understanding of the socio-economic determinants affecting health, and the personal implications these have on individuals, both in the UK and Kenya, to those living in poverty. I hope that through my better understanding, I will be in a position to improve my care of patients." (Fellow, March 2016)*

*"Problem-solving skills (are) needed for a Family Physician as myself to remain relevant to the unpredictably evolving arena of primary care.... 2. Learning how to mentor and appraise across peers and seniors has equipped me with skills that I consider Key for the educator/trainer I aspire to be within the next five years. 3. Research skills: I have built on the qualitative research skills ... and I (will) continue to sharpen them in preparation for primary care research which is a largely unexplored domain .., yet it holds a wealth of answers to many "why" questions that would complete quantitative research work." (Fellow, March 2016)*

*"...The remarkable personal development I have experienced through this programme will definitely be put to good use- in terms of problem-solving skills, team working, networking and, I daresay, leadership. Improvement in my interviewing skills will be invaluable in helping to have more effective consultations. The compassion for communities in need will translate into caring more about the "why" for each patient I encounter, exploring their ideas, expectations and concerns not just as a tick box exercise but because I really want to know where they are coming from; to arrive at agreed actions (the so-called shared decision making). The mental shift in my view of health as a human right to which everyone is entitled will have a positive impact on my practice. Finally, listening to former patients speak well of their now-retired (doctor) who apparently practised with a lot of "heart" has liberated me to be more courageous about doing likewise." (Fellow, March 2016)*

*" Incorporating each person's strengths and weaknesses is a skill that can help in working together with people from different cultures and different professional background. Presentation skills- how to structure what to tell who, what to present to who has been important to me. The difference between what and how to present to the academician and the community. In my clinical grounds through this project, I have gained an insight of looking at illnesses from a broader perspective in reference to other factors that influence the occurrence of disease." (Fellow, March 2016)*

### *Added value for the fellows' future workplaces and patients*

All of the fellows described how they had learned methodologies and seen new perspectives on health that would change the way they would meet patients and perceive the organisations they worked for.

*"It's a little bit embarrassing that I didn't get this before, but … understanding poverty, some of the challenges they face, ….rather than thinking, ah... they have come for sick notes again, actually (trying to) understand what else they might have going on at the same time in their lives, so yeah it will help me see thing in different perspectives (in my clinical work)… A broader way of seeing, not just seeing this is the problem, and that is the problem, seeing more like the whole picture..." (Fellow, March 2016)*

The fellows' new perspective was, however, not just about seeing and listening to the individual patient in another way, applying the gained understanding of social determinants of health, Sen's Capability approach, and the many faces of poverty, it was also the understanding of the transferability of the health needs analysis model and the prioritisation model that they had developed. One fellow had thought that the health institution (s)he was working for could do a health needs analysis as a basis for the strategy and planning of health services, allowing the patients' needs and priorities to define what the health institution should deliver. Another fellow expressed a similar idea like this:

> *"I could use the health needs analysis and our voting method even in a smaller place, like in a dispensary for instance, people would embrace that, understand that I as a health professional care about them, and together we could move forward to attend THEIR needs instead of what we as health professionals could imagine were the patients' needs….Together the patients and I could grow into a new understanding of what health really is about…" (Fellow, March 2016)*

### *Added value for the local health professionals and health officials of the two communities*

In Kenya, the fellows started the programme at the same time as a community health professional was employed as the first local health professional in the community. The health professional worked with the fellows as a fifth member of the team and gained a totally different introduction to the community than she would have had if she had been there on her own. The collaboration gave mutual peer support while the fellows were working in that community, and after the programme, this collaboration was an important foundation for an international partnership with all of the fellows.

> *"They helped me to get access to other people. …I was part of the team, but I have also been able to give my view, I contributed as I could…. They helped me with coming up with other ways to work with the community, made me known to the community…. They had ideas for courses for me to attend, attended the problems of the community…I wish they could extend their stay..." (The Community health professional, November 2015)*

The outcome of the GHEFP fellows' work was also more than just reporting the community priorities back to the responsible health officials. It was also creating a possible entry for the locally responsible health officials to get into dialogue with the community members, and through that, in the future start a process of finding solutions to all the health needs of that community. It also made data available about the community which the health officials saw as a potential starting point for future health research in the community.

Finally, an added value for the local health professionals was in relation to the academic output of the GHEFP. One of the supervisors was encouraged to do more research after the participation in the programme.

### *Added value for the communities*

For each of the two communities, the fellows wrote a report on the identified global health issues, the community priorities, and suggested solutions possible within the existing resources of the community. The fellows sent the report to all stakeholders and community leaders in the community, handing over their work for further development within the community itself. Furthermore, the communities had been part of the development of the prioritisation and through participation each of the communities had witnessed engagement from important stakeholders and community members in a collective process, discussing the community's health.

> *"... I know we have done something.... even if the government and (health officials) do not do anything (based on their report) we have done something important in this community… (The fellows) have given a voice to the community, … the (community) had somewhere where they could tell about their challenges, all their problems, and this is really helping. They were teaching them. One of the pupils (a girl at grade 7) at school, she was so low, she couldn't even talk, but (the fellow) helped, just talked with her, she had issues with the school fees. After that the girl just told everything, the fellows helped her, and this girl (is) now spearheading the issues with the girls' (health), openly interacting with the same, same girls who said that they had never had someone to speak with, but now they spoke out openly." (Community health professional, November 2015)*

> *"It has been really helpful to have (the fellows) around, on the ground, providing the level of doctor visibility…. I have been working with this community for 35 years; I can't remember seeing nine doctors at a meeting, I mean there were nine of them present at that*

*(prioritisation) meeting, it was amazing. Usually, we struggle to get just one of them coming to our meetings. So it has been really good, being able to bring in the (fellows') health perspective on things into the minds of the community." (Community leader, March 2016)*

### *Added value for the Health Education East Midlands*

Funding, supporting and engaging with a programme like the GHEFP, the Health Education East Midlands (HEEM) followed the contemporary recommendations for the NHS and Health Education England to *"actively support international volunteering and the education and training of UK healthcare and development workers abroad"* (The All-Party Parliamentary Group on Global Health, 2015).

HEEM also acknowledged the request from the All-Party Parliamentary Group on Global Health for mutual learning and co-development, with the aim to improve and adapt health services and learning from others. This has given HEEM a possibility to contribute actively to the construction of UK as a global health hub, engaging with stakeholders from outside the health care sector with the possibility to establish the UK as a "global source of health expertise".

With the piloting of an evaluated global health exchange project, HEEM has made it possible for the wider team of GHEFP to contribute to the requested academic evidence of the impact of training in global health for trainee health professionals (Kerry et al., 2011).

If the GHEFP were to be implemented and offered as a possibility for the trainees in the East Midlands, this added value could be used for future recruitment purposes, because possibilities like these would be expected to make the deanery more attractive as a training environment.

# Discussion

There is a call for education in global health: *"Global health training programmes should be evaluated by the quality of the experience for trainees from all settings and by the incremental improvement in in-country care, infrastructure, and/or research."* (Kerry et al., 2011). The GHEFP aimed exactly at this: To support the professional development of the young health professionals working as fellows in this programme, but also to support the sustainable development of the health in the two local communities in which the fellows were working.

The GHEFP allowed experiential learning about global health for health professionals and was set up as a UK-Kenya exchange project with a focus on global health issues in local contexts. The four UK and Kenyan health care professionals of this pilot programme worked together as a team during the entire programme, supervised by the project leads and local professionals, utilising existing community resources and expertise, and it was supported by an adapted model of empowerment evaluation.

The evaluation methods used were qualitative research methods including in-depth interviews, short open-ended survey questionnaires, diaries, reflective notes, and photos. To allow the evaluation to be process oriented and dynamically responsive to the developing needs, there was regular planned and ad hoc evaluation meetings. The dynamic process was also supported by Skype meetings and a Whatsapp group including all fellows, project leads and supervisors.

All fellows achieved the professional progress the programme aimed for, and the two communities that the fellows worked with were left with a new understanding of their global health issues, and to some extent also sustainable solutions and ways forward within the locally available resources.

## *Strengths and weaknesses of the chosen evaluation model, theoretical framework and methods*

### The evaluation model

The programme has been supported by an adapted empowerment evaluation model. Adaptation often calls for a discussion of the validity of the results.

I see the adaptation of the model as a strength of this work, and agree with Fetterman and Wandersman when they state that *"Evaluation approaches need to be adapted (with quality) - not adopted by communities"* (authors' brackets) (Fetterman and Wandersman, 2007)(p 187).
The positive consequence of this adaptation was, that not only did the fellows of this programme lead their own development and meet the objectives of the programme, they also adopted the ten principles of empowerment evaluation in their health needs assessment work in both the socially deprived communities they were working with.

The adaptation was in the method that I (as the evaluator) chose to "reality check" the fellows' progress in the programme. The empowerment evaluation model very often uses a numerical scale from 0 to 10 for the participants of the programme to rate themselves and their progress (Fetterman, 1994). The GHEFP fellows were not asked to evaluate themselves by rating their progress on a specific scale. Because they had adapted the principles of empowerment evaluation for their work, they functioned as empowerment evaluators themselves in the health needs assessments, resource mapping and problem solving in the two communities, shifting the role explicitly to rate progress from themselves to the populations in the communities. Instead of a numerical scale, the self-evaluation was done through self-reflections, diaries, discussions in the group. Together with the continuous in-depth interviews and surveys conducted by me as the evaluator, these self-reflections have been an important part of the data collection, continuously describing the progress and the needs of the group to progress to the next step.

The role of the empowerment evaluator is "...to guide and foster the development of an organisation, programme or social community with the participants serving as the empowered agents of change" (Chatterji, 2001)(p 363).

The credibility of the evaluator is always important, perhaps in particular when the work is built on the empowerment evaluation model (Chatterji, 2001). For the production of this report, I have applied the same principles I would have done in a research project, utilising participatory action research design with qualitative research methods.

The core team have all had the chance to read and comment on this report to ensure that the content was recognisable and acceptable for all members of this team, but the report would probably have looked differently if the entire team had written it.
As the evaluator, I would have liked to complete the empowerment evaluation model with all of the core team writing the evaluation report together. The barriers to this were not just the fact that all fellows and the two other project leads after the programme had ended had to resume their busy work life, including the pursuit of writing academic papers on the GHEFP work. I also chose to write this report on my own because some of the data was constructed with the label of "not for sharing with the entire group, only the evaluator".
In every process evaluation model, there are pros and cons for total openness and sharing of every detail and every level in a programme. With total openness, every team member will have detailed knowledge of every level of the work in the programme; the team gets the chance to solve all the problems and challenges as they arise with the growth it gives to problem solve together, and the products developed are truly owned by everyone. However, this takes time, a lot of time, and in the process, it may derail the purpose of the teamwork, especially when the people in the team have never worked together before. It is also challenging when the team members have limited experience with the type of work they are expected to do, when all have different cultural, educational, professional and social backgrounds; and when the programme period is restricted to only 6 months with two placements and carte blanche to do the work in the way the team finds the best.
The benefit of the semi-open approach that I took was that I could work with smaller issues flagged up by a single member, either by working with that member only if the issue was personal, or I could "generalise" or "theorise" the issue at evaluation meetings to facilitate

progress for the fellows. This strategy aimed to enable the fellows to avoid their progress being held up by personalisation, defence of standpoint or other inappropriate reactions that can occur when people are under pressure professionally, time-wise, and even in a non-familiar environment. If no imminent evaluation meeting was planned, I could call for a Skype meeting. This strategy depended on the fellows and the other members of the team reacting quickly on every issue coming up, either by taking up the issue within the team or by contacting me or one of the other project leads. Although this happened most of the time, there were a few times during the programme where I had to ask why a particular issue had not been shared sooner in one or the other way.

For the fellows to work in this way was quite demanding, for most of them it was also unfamiliar, and openness to this extent was even sometimes perceived as unnerving and uncomfortable. With this in mind, the results of their work shine even more. It is, therefore, my perception that the fellows managed the process extremely well, and that it was right to choose an open process as the overall model, but with the possibility of using me (the evaluator) as the facilitator to flag up difficult issues that otherwise would have taken too much time and energy from the fellows' work and progress in the programme.

**The choice of the theoretical platform**

The theoretical frame of reference for the programme was a triangulation between Sen's Capability Approach (Sen, 1997), and Koplan's definition of Global health as dependent on wider social determinants (Koplan et al., 2009) with the methodological approach of Needs Assessment (Sleezer et al., 2014) in relation to health, and focusing on a qualitative research approach.

We could have used other frameworks. However, the work of Sen reflects very well the methodological platform for the ethnographic qualitative research methods used in the programme. Ethnography is about studying culture, the meanings of the ways people live, what they take for granted in their specific environments, using specific artefacts, and how they interact with other people. The parallel to the capability approach is obvious, even

down to the point, that Sen describes how value of functionings are taken for given by the individual (Wells, 2010).

In relation to the definition of global health issues, we chose a broader definition than often addressed in disease-oriented global health campaigns ("United Nations Foundation - Global Health," n.d., "WHO Official Global Public Health campaigns | communitymedicine4asses on WordPress.com," n.d.). Working with the communities' priorities rather than the issues known to the health professionals as potentially major factors of morbidity and mortality could be perceived as irresponsible and neglecting the evidence-based medical knowledge of malaria, TB, HIV measles, polio and other diseases known to be causing ill health in large parts of the world. An example was the expected high prevalence of HIV in the Kenyan community. The Kenyan health officials were aware of the potential high prevalence of HIV in the Kenyan community, and as health professionals worried about infection routes and socio-cultural-sexual practices in the community supporting the further spread. They could have insisted on the GHEFP fellows to choose this health issue, collect data and find solutions to this. They however all emphasised the possibility to create a better dialogue with the community through the immediate response to a health need that the community had prioritised.

The choice meant that the fellows did not report back with detailed or in-depth descriptions of the health issue that the health officials mostly worried about. The consequence was also that the outcome of the GHEFP fellows' work was not just reporting the community priorities back to the locally responsible health officials, it was creating a possible entry for the health officials to get into dialogue with the community members, and through that in the future start a process of finding solutions to all the health needs of that community. The fellows work also made data available about the community which the health officials saw as a potential starting point for future health research in the community.

**Choice of data collection methods**

The fellows chose to start their data collection using qualitative research methods of individual in-depth interviews with key informants from the community, leaders, and

representatives from different community groups. They also used focus group interviews, observation and a simple form of photo-elicitation to support their understanding. Based on the qualitative findings in the Kenyan community they first developed a survey that was meant to be used for quantitative data collection in a strategic sample of the households, but because of time constraints, this survey was never used. The consequence was that the fellows did not have data telling them about the frequency of the identified health issues, but an insight to some of the important cultural and social meanings which in this community was leading to the existence of the health issues. Another positive consequence of the time constraint was that the fellows in their wish to quantify the importance of the different health issues developed a community prioritisation method. They tested this method in both the communities, and with very little adaptation this method proved to be an important gateway to understanding the community members' perception of health. Instead of quantifying known global health issues in two socially deprived communities, they developed a method that can probably be used in any socially deprived community in the world to understand some of the reasons behind global health issues being so difficult to address. The fellows are currently in the process of writing up this method for an international academic publication.

### *How does the GHEFP compare to other programmes*

In recent years many medical schools have encouraged their students to study abroad for a shorter period, and postgraduate medical educational institutions and organisations have encouraged out of programme experiences, international exposure (Knudson et al., 2015) for education and training exchanges between different countries ("Global Family Doctor - Wonca Online," n.d.).

Most postgraduate exchange programmes within the health care sector are however not true exchange programmes in that the programme *either* sends health professionals from a high-income country to a low or middle-income country *or* the other way round.

Very often the programmes see doctors from the *from high-income countries* visiting and learning from colleagues in low-income countries, without giving the health care

professionals from the low-income country the equivalent chance to learn from the contexts and settings in the high-income countries. Secondly, it is mainly *individual* health care professionals visiting and learning from working in unfamiliar settings of healthcare without any emphasis on teamwork and sustainability at the visited healthcare facility. Thirdly the visiting doctors often give clinical services here and now without any development of sustainable solutions to the problem they are addressing in their contribution of health care services. Fourthly they do little to improve local capacity in low-income countries and indeed, it might be argued they only perpetuate the problem.

The voting model that the fellows developed and tested during the GHEFP stands out from many traditional health needs analysis in its emphasis on empowering the community throughout the entire process from planning the health needs analysis to finding the possible sustainable solutions within the available resources.
Through their work with the communities and the local health professionals, but also locally responsible health officials, the fellows obtained a responsiveness of the health care system in the two communities, mainly in Kenya, but perhaps also in the UK. This way of working shows a practical illustration of Frenk's suggestion: *"…we must also include other goals that are intrinsically valued beyond the improvement of health. One of those goals is to enhance the responsiveness of the health system to the legitimate expectations of the population for care…. fair financing, so that the burden of supporting the system is distributed in an equitable manner and families are protected from the financial consequences of disease."* (Frenk, 2010)(p. 1-2)

### *What are the challenges and lessons learned for implementation of a programme like the GHEFP*

The recommendations reflect the challenges of the programme. The challenges are all manageable smaller adjustments in relation to managerial, educational and resource issues that potentially can become obstacles when differences in culture, tradition and perceptions are not taken into account.

These set aside the fellows who were granted time off from their work/their training all completed the programme, all succeeded delivering the expected outcomes of the programme and there was added value for all involved, including the funding organisation.

The most important lessons learned were about how to practically and academically support a group of health professionals from different cultures, traditions, educational and social systems. These included challenges in relation to accommodation, preparation for teamwork and academic work.

**Accommodation**

One of the challenges during the programme was finding the right accommodation for the fellows. The fellows' main task was within a short period to establishing collaboration and work together with people living in severely socially deprived areas. A logical solution would be to minimise the transport time to and from the community to allow most possible time for the fellows and the people from the community to meet. This solution, however, put the challenge to the programme if the fellows were to live in the same area and therefore also in accommodation which would be far below their normal accommodation standards. It also raises questions about health and safety, exactly as the fellows raised questions of health and safety in relation to the accommodation of the members of the communities. In the Kenyan community living like the members of the community would have meant living in huts with little security, no water and electricity, indoors cooking over open fire and no sanitation. In the UK community, it could have meant un-insolated accommodation without heating, in areas with frequent episodes of violent assaults. The interesting question here is

how close to social deprivation are we as health professionals prepared to get in the pursuit of understanding health issues caused by poverty and social deprivation. The role of the UK GP was once described as the family doctor living in close proximity to her patients, and through that position offered the understanding of the community from within. This role might have changed for UK GPs, and for the Kenyan family doctors, this role can still only be an aspiration. Educating Kenyan family doctors have only taken place over the last decade, and most of the Kenyan family doctors are employed in partly or predominantly managerial roles in hospitals. The closest to that community-based role is probably the role undertaken by the Kenyan clinical officer.

**Teamwork and academic work**

Preparing the fellows to work as a team, giving them tools to understand and handle group dynamics and conflict resolution became an important issue in this group of fellows. As project leads, we had not expected it to be important but seen in retrospect we could have anticipated the need for tools to be given from the very beginning. Unless you have trained at an institution using problem-based learning or other kinds of group pedagogy, the academic discourse in health professional education is focused on the individual achievement. It has even been suggested that health professional education discourses are obscuring broader issues to an extent that it has an impact on the professionals' healthcare practice (Lowe, 2013).

Most of the fellows had done different but relevant kinds of academic work, so we expected the fellows to have the skills to find literature, write academic papers, present academic work in oral presentations, use power point or equivalent, use some types of data collection and analysis methods. It has previously been shown that most academic work as part of undergraduate or postgraduate education is perceived as a one-person exercise, and it is unusual to see students write in groups with constructive feedback on their writing (Fergie et al., 2010). In this programme, we took the group through a seminar of identifying the topics for their academic writing, basic structures and content of academic papers and how to find and manage literature. This seminar was based on our experiences with doing

research training for GP trainees (Tulinius et al., 2012) and University faculty in different countries. There are, however, a number of formally described supervision models for academic writing that with the support from supervisors and facilitators could easily be adapted for programmes like the GHEFP (Golkowska, 2012; Lee and Murray, 2014).

Seen in retrospect the challenges in relation to accommodation, preparation for teamwork and academic work is in fact a very simple illustration of the core questions you need to ask when the work demands multi- and trans-professional, multi-cultural, empowering collaboration as it will be when working with global health:
How much do you, as a health professional, understand what it means to live in a poor and socially deprived community, and how much are you willing to give to get that insight?
How prepared are you to set aside your culture, traditions, perceptions of health, and personal and professional values to understand others?
And when you have done the practical work and had a glimpse of understanding how other people understand and prioritise in life, how able and willing are you to use even more time and resources to communicate your insights to the rest of the world?

### *Does a programme like the GHEFP contribute to finding sustainable global health solutions?*

The fellows succeeded in getting to networking in the communities with the aim to allow different stakeholders to coordinate initiatives. They also succeeded in giving voice to community members and allowing that voice to be heard by health professionals as well as health officials in the two communities. In the Kenyan setting, the health officials were able to act immediately on some of the recommendations from the fellows' work, starting to build better access to health for the population in the Kenyan community. They also saw the GHEFP report from the fellows as an important document for building the future strategy for health in that area. The barriers in the Kenyan setting were infrastructural and logistic issues, like waiting for the planned electricity to supply the dispensary, and getting the local health professionals trained *before* the medicine and vaccines are shipped to the area. The

GHEFP report from the fellows, however, provided an important starting point for the health strategy development for a community where almost no data had previously been available.

Although the health issues were very similar in the two communities, the barriers were different in the UK setting. As in Kenya, the fellows managed to network and put different stakeholders in contact with each other for the UK community. They also managed to give voice to members of the UK community developing a report with the community's prioritisation of health needs and recommendations, but in the UK, the barriers were more due to project and data overload, and decisions from financial and political stakeholders. Although the local health professionals were interested in serving the local community, the general health strategy was based on nationwide guidelines. The GHEFP report was not coming from any of the regulatory bodies, but a very local voice, and therefore difficult to integrate into daily delivery of health services and difficult to give a place in the planning of the future strategy for better health in the area.

So the answer to the question in the heading of this section is: Yes, the fellows did find sustainable solutions within the available resources in and with the two communities. However, to have *any* impact on the global health issues identified by any community, the health care system needs to collaborate, co-author and use the recommendations, across logistic, infrastructural, financial and political borders (Frenk et al., 2014). With the piloting of the GHEFP HEEM has contributed to further education of health professionals, towards a strengthening of health systems globally, just as encouraged in 2010 by the Global Independent Commission on the Education of Health Professionals for the 21st Century:

> *"We … call on the most important constituencies to embrace the imperative for reform through dialogue, open exchange, discussion, and debate about these recommendations. Professional educators are key players since change will not be possible without their leadership and ownership. So too are students and young professionals, who have a stake in their own education and careers. Other major stakeholders include professional bodies, universities, non-governmental organisations, international agencies, and donors and foundations. Most importantly, implementation of our recommendations can be propelled by a global social movement engaging all stakeholders as part of a concerted effort to*

> *strengthen health systems. The result would be an enlightened new professionalism that can lead to better services and consequent improvements in the health of patients and populations. In this way, professional education would become a crucial component in the shared effort to address the daunting health challenges of our times, and the world would move closer to a new era of passionate and participatory action to achieve the universal aspiration for equitable progress in health. Of necessity, such progress will be fuelled by knowledge, giving professionals an essential role in the realisation of the value…"* (Frenk, 2010)

Listening to the fellows of the GHEFP, how they changed their perspectives and perceptions of poverty, social deprivation and global health, and how they expected this to have changed the essence of how they, in the future, will deliver health care, there is indeed a hope that these four health professionals will be part of Frenk's new era of "passionate and participatory action to achieve the universal aspiration for equitable progress in health", and that the wish of one of the UK community leaders will come true:

> *"….Probably if the doctors (in a community) would set aside some time to come out to us in the community projects, we could move it forward together, but I think the doctors would have to engage at a personal level,…. so we as community leads and people, in general, would know who it was, …..working in this area, committing to one of these (priorities). (It) has not happened before, but some of the fellows being doctors and based at a surgery, perhaps that could happen… one day". " (Community leader, March 2016)*

# Recommendations

These recommendations are based on the evaluation of the GHEFP and aiming at the successful implementation of true global health exchange programmes with the expectation of outcomes, similar to the GHEFP. The recommendations are *not* relating to the content of the health needs analysis performed by the fellows working with the two communities, shown in Appendices 10 and 11.

The recommendations are given on the basis of experiences from the programme, either where the programme clearly benefitted from this recommendation, or where it was clear that the recommendation was not in place with the direct consequence of this. The recommendations are also based on suggestions given by the wider team at the end of the programme when asked if they had suggestions for future programmes like the GHEFP. If the latter the recommendation will be clearly marked by the sentence "It is suggested that…"

The recommendations for implementing similar true global health exchange programmes are of practical-logistic, educational and financial character:

### *In advance preparation of the wider communities*

1. All potential collaborators within the wider communities should be invited to engage well in advance of the programme start. If academic or professional institutions are expected to engage, the project leads need to establish the contact and develop the programme in accordance with the wishes and needs of these collaborators, e.g. health and educational officials.

2. Before the programme is set up, it is important for the project leads to explore potential obstructions and challenges, exam dates, practical immigration issues, and the need for ethical consent to the programme.

3. Before the programme starts all appointed fellows should take part in a meeting, discussing the programme in details with the project leads to assure that all fellows have had the same information. It is important that all fellows have a common understanding of the possible benefits for their career, and in what way participation in the programme will be documented (certificates, recommendation letters, testimonials, academic papers, etc.).

### *Logistics and practicalities*

4. It is important that all fellows are free from other professional duties from day 1 in the programme. All fellows should be able to attend all of the programme, including the entire induction programme before each of the placements. The consequence is that the timing of the programme needs to steer clear of exams or other academic or professional demands that should be possible to foresee by the home institutions. It is suggested that all the fellows are paid the same salary during the programme, and not relying on the individual institutions willingness to and ability to pay the individual fellow.

5. Accommodation for the fellows needs to be conducive to working. Insufficient internet access, lack of basic hygiene, inadequate diet is likely to cause distraction from the work with the communities. If logistically possible it is suggested to include the fellows in the choice of the accommodation to avoid the need for finding and changing accommodation halfway through the programme. For some of the fellows, it might also be necessary to ensure that they can attend church services and have time off from the programme to see family, friends and have private time.

### *Teaching, facilitating, supervision and other kinds of support throughout the programme*

6. An empowerment model like the one that was used in the pilot programme is recommended if the aim is to empower individuals and communities to develop

their capabilities, rather than delivering solutions to predetermined problems. It can allow the fellows to develop their skills, understanding and ways of working with global health issues through the work they do to empower the communities identifying their health needs, prioritising the needs, and finding possible solutions to these needs within the available resources.
However, it sets high demands for the educational support. It is important that the programme has incorporated sufficient resources (personal, professional, financial and time) for ad hoc facilitation of the group of fellows, teaching sessions on demand, and supervisors who are an integrate part of the programme.

7. There should be a comprehensive and structured induction programme immediately before the fellows enter each of the communities. This programme should give the fellows and all supervisors a comprehensive understanding of the programme content, process and expected output. It should introduce the fellows to the chosen community historically, geographically, and culturally in relation to selected specific health and gender issues. It should also introduce the theoretical and methodological approach to exploring health needs analysis, global health and poverty enabling the fellows to conduct the health needs analysis with relevant tools and theoretical background. The induction programme should prepare the fellows to work with the programme's empowerment model with leadership and teamwork and the possibility of ad hoc teaching sessions should be emphasised and encouraged. Particular attention should be paid to both theory and implementation training of group dynamics and conflict resolution. Using the fellows as experts on their home culture and health care systems should be emphasised by integrating the fellows as much as possible in delivering the induction programme.

8. The supervisors should be an intricate part of the programme. It has been suggested that all supervisors should be part of the true exchange throughout the programme, working with the fellows in both countries, to allow sufficient understanding of the nature and progress of the programme.

9. Is has also been suggested that the local collaborating health professionals who had worked very closely with the fellows in the community should be part of the true exchange, or that the true exchange is supporting a multi-professional team of doctors, clinical officers, nurses and other health professionals.

10. It is suggested that the fellows should be supported to understand and implement a distributed leadership model to minimise conflicts regarding roles and obligations in the group.

### *Budget*

11. A "teaching, meetings and progress line" in the budget is recommended to allow the fellows to call for different types of meetings with the supervisors and the communities.

12. It was suggested that the budget should also be able to support small initiative line that would allow buying a first aid kit to kick start first aid training and delivery by the local health professionals or trained members of the community. This recommendation would, of course, go against the overall aim to find solutions that are sustainable and within the available resources in the community.

# Conclusion

The report describes a successful piloting of a rare initiative.
Most other exchange programmes focus on the individual exchange fellow delivering health services in a 'different from home' setting, immediately benefitting the visited community with the number of health services provided. However, long-term and sustainable solutions to existing health needs are usually not part of the aim for the exchange.

The GHEFP allowed experiential learning about global health for the health professional fellows and it was set up as a true UK-Kenya exchange project with the focus on global health issues in local contexts. The four UK and Kenyan health care professionals worked together as a team during the entire programme, and they all achieved more than the professional progress the programme originally aimed for.

The impressive result was that the fellows managed to transfer and apply all ten principles of empowerment evaluation from their own development to the work they were doing with the communities.

This meant that the programme not only allowed the fellows to develop professionally, but it also supported two socially deprived communities to create sustainable solutions to existing global health issues within the locally available resources.

The empowerment model we used allowed the fellows to develop their skills, understanding and ways of working with global health issues through the work they did to empower the communities identifying the communities' health needs, prioritising the needs, and finding possible solutions to these needs within the locally available resources.

The fellows' professional empowerment included a broader understanding of global health, improving their global health-related problem-solving skills, and developing international professional partnerships. At the end of the six months programme they all saw their learning during the GHEFP as highly relevant and usable in their future work as health professionals in their different professions and different home countries. The added value of

the programme therefore benefitted the fellows, the fellows' future work places and patients, the communities, the local health professionals and health officials of the two communities, and the funding organisation Health Education East Midlands, UK.

An empowerment model like the one that was used in this programme is recommended if the aim is to empower individuals and communities to develop their capabilities, rather than delivering solutions to predetermined problems.

Working across boundaries of culture and traditions in relation to time, education, health care, faith, interrelationships and professional values influenced the planning, delivery and reporting of the work in the GHEFP. Using the empowerment model it was important that the programme had incorporated sufficient resources (personal, professional, financial and time) for planned as well as ad hoc facilitation of the group of fellows, teaching sessions on demand according to the fellows' developing needs and progress, and supervisors who are an integral part of the programme.

Although the UK plays a major role in health globally, the latest recommendations encourage the NHS and other health bodies to continue their support for health care systems, and they encourage Health Education England and the equivalents in the other UK countries to support international volunteering and the education and training of UK healthcare and development workers.

The evaluation of the Global Health Exchange Fellowship Programme has demonstrated how it is practically possible to implement the recommendations as well as the contemporary theoretical understanding of global health, making global health real for real health professionals and real communities in different parts of the world.

The evaluation of the GHEFP gives hope that it is possible to make true exchanges of health professionals, exchanges that lead to the empowerment of socially deprived communities to raise awareness and create community ownership of solutions for better health.

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# Appendices

## Appendix 1: UK recruitment advert

**Kenyan Exchange Fellowship (Out of Programme Experience - OOPE)**

Applications are invited from East Midlands GP registrars completing their ST2 year in August/September 2015, for a six-month exchange Fellowship project that will start in Kenya, and completed in East Midlands (UK). The UK fellows will work alongside 2 trainee family health practitioners in Kenya. This is an exciting opportunity for outstanding and motivated GP registrars to experience and be involved in a global health initiative.

There are 2 fellowships available in the East Midlands and 2 in Kenya, where recruitment for the project has begun.

**Brief description of project**

The project will start mid-September, 2015 in Kenya, beginning with an induction programme. The combined Kenyan and UK team will carry out a health needs assessment on a rural [Kenyan] community and identify their health priorities. These are safe and well defined communities away from the major cities. A specific health need will be identified and the team will come up with practical and sustainable solutions that can be presented to the community for action. The health need should resonate with a similar need in socially deprived urban communities in the United Kingdom. After 2.5 months the combined team will relocate to the East Midlands and be based at an inner city teaching and training practice in an area of social deprivation. After an induction period, the team will investigate the same community health need, and come up with UK based solutions in 2.5 months. The final and 6th month, will be based in East Midlands during which the Team will write up the project with a view to publication. The Kenyan fellows will return to Kenya, and the East Midland fellows will resume their GP Training programme in ST3.

**The Fellowship**

All immunisation, air-travelling and accommodation costs will be covered for the Kenyan and East Midlands fellows. Basic salaries will also be covered. During this OOPE, there will be no clinical or service commitment and implementation of any solutions will not be the responsibility of the fellows. There will be senior supervision both in Kenya and United Kingdom, for the six-month period and ongoing assessment of the project by a Cambridge - based research team, Dr Charlotte Tulinius and Dr Arthur Hibble.

Dr Prit Chahal (Health Education East Midlands), will be joining the team for 2 - 3 weeks in Kenya alongside colleagues from Cambridge, and will continue to be a supervisor in the United Kingdom.

**Applications and Eligibility**

1. Written (or Emailed) approvals from both the Training Programme and your Educational supervisor confirming good to excellent progress through training, and ARCP reviews at ST1 and (expected) at ST2.

2. A CV with a 300 word statement on how you envisage the Fellowship would enhance your personal and professional growth.

3. Send the above to XXXXXX by no later than Friday 8th May 2015 (closing date).

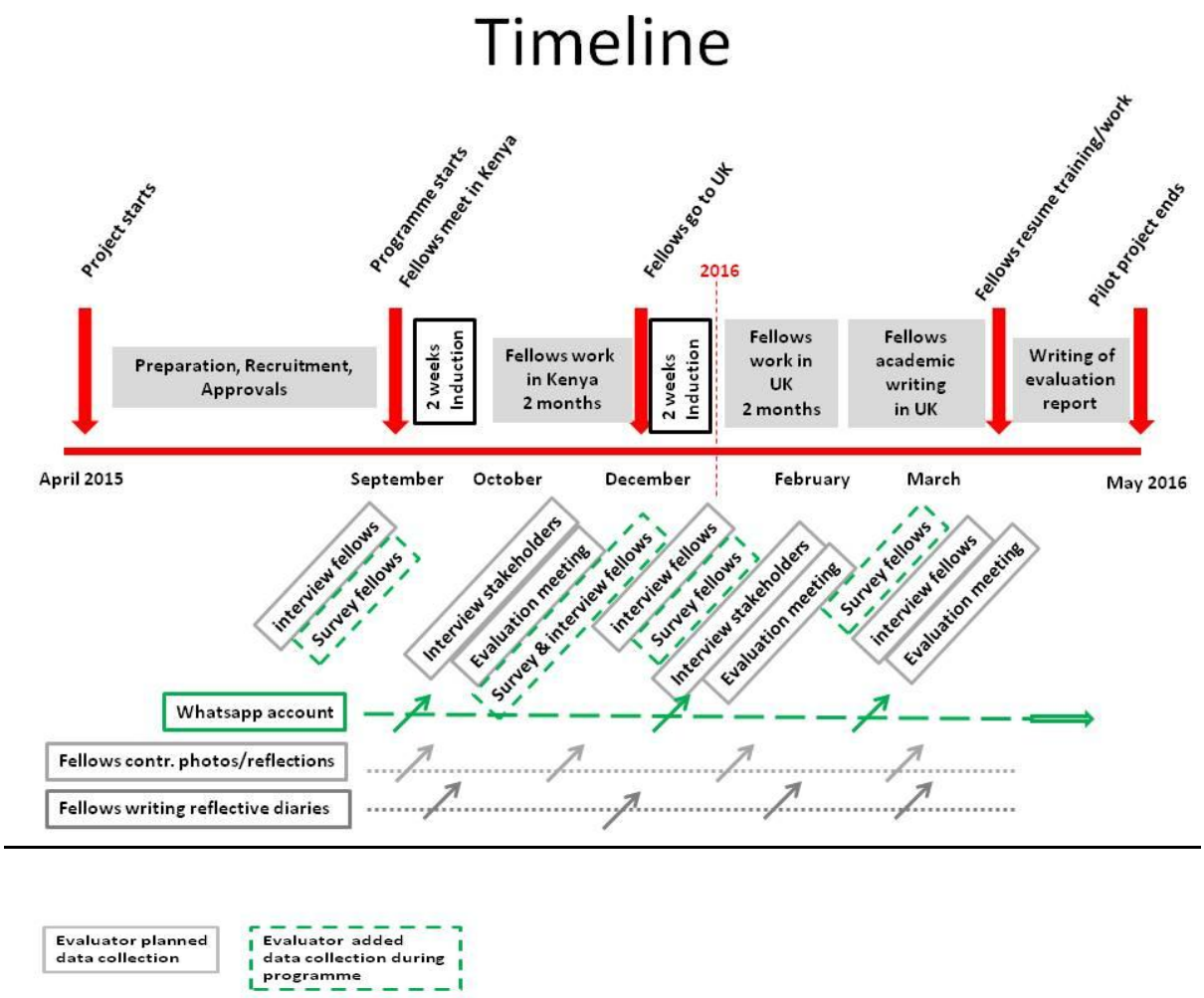
4. Decisions / interviews etc will be made within 2 weeks of the closing date

5. More information will be provided on receipt of applications, but address any interim questions via Email to pchahal@nhs.net.

Dr Prit Chahal

Associate Postgraduate Dean

## Appendix 2: Timeline for the evaluated programme period



**Appendix 3: Induction programme in Kenya and UK**

The point of departure for both induction modules was in the fellows' experiences and perceived needs at the time of the sessions. Evaluation interviews and evaluation meetings with the core team and the wider team were part of the induction in both settings.

***Induction programme in Kenya:***

19th September - 4th October 2015

Introduction to and discussion of

- structure and content of the GHEFP and suggested evaluation tools
- the area historically, geographically, and culturally in relation to selected specific health and gender issues (maternal and newborns' health, HIV, circumcision, contraception, nutrition, stigma)
- health needs analysis methods and tools, including qualitative research methods, community analysis, resource mapping, and getting access to community and documentation of health
- teamwork across disciplines, traditions and culture
- clinical and professional leadership
- definitions of global health and the theoretical platform for the GHEFP including the capability approach and social, political and interdisciplinary dimensions of global health
- health and safety while working in Kenya and the organisation of the Kenyan health care system

Visits to the locally responsible health authorities, and introduction to the community leaders and other stakeholders in the Kenyan community.

At the end of the induction period, the fellows were facilitated to prepare the plans and tools for their first entry to the community.

The social programme included a visit to relevant historically important sites and a 2½ day safari where mornings and evenings were used for focused forum theatre to prepare the fellows to work as a team, supporting each other.

The Global Health Exchange Fund, Nottingham funded the fellows' and two of the project leads' participation in the First Patient-centered conference at Kenyatta University from September 29th to October 2nd, coincidentally happening at a convenient time for the GHEFP. This occasion was expected to support the development of international professional networking and a possibility for the fellows to be updated on latest local development within patient-centered care.

*Induction programme in the UK:*

7th -18th December 2015

Introduction to

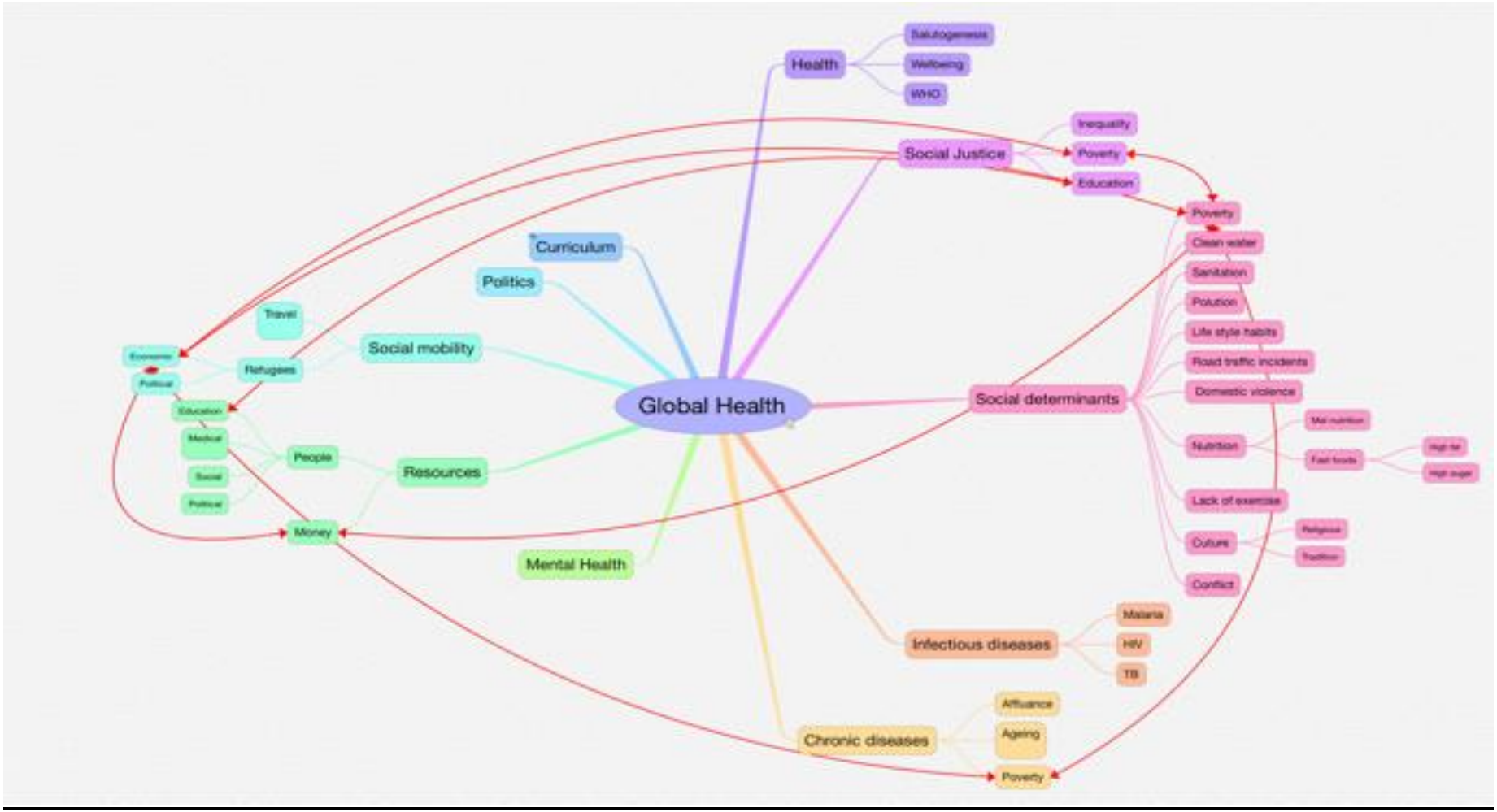
- all doctors and staff working in the GP surgery chosen to be the contact base for the fellows throughout their work in the UK
- health and safety while working in the UK and the organisation of the UK health care system
- the area historically, geographically, and culturally in relation to selected specific health and ethnicity issues
- poverty and
- group dynamics

The Kenyan fellows also had two days of “sitting in” on patients encounters in general practice with the UK educational supervisor and coordinator. This was set up to allow the Kenyan fellows to experience the culture and traditions of health care delivery in the UK.

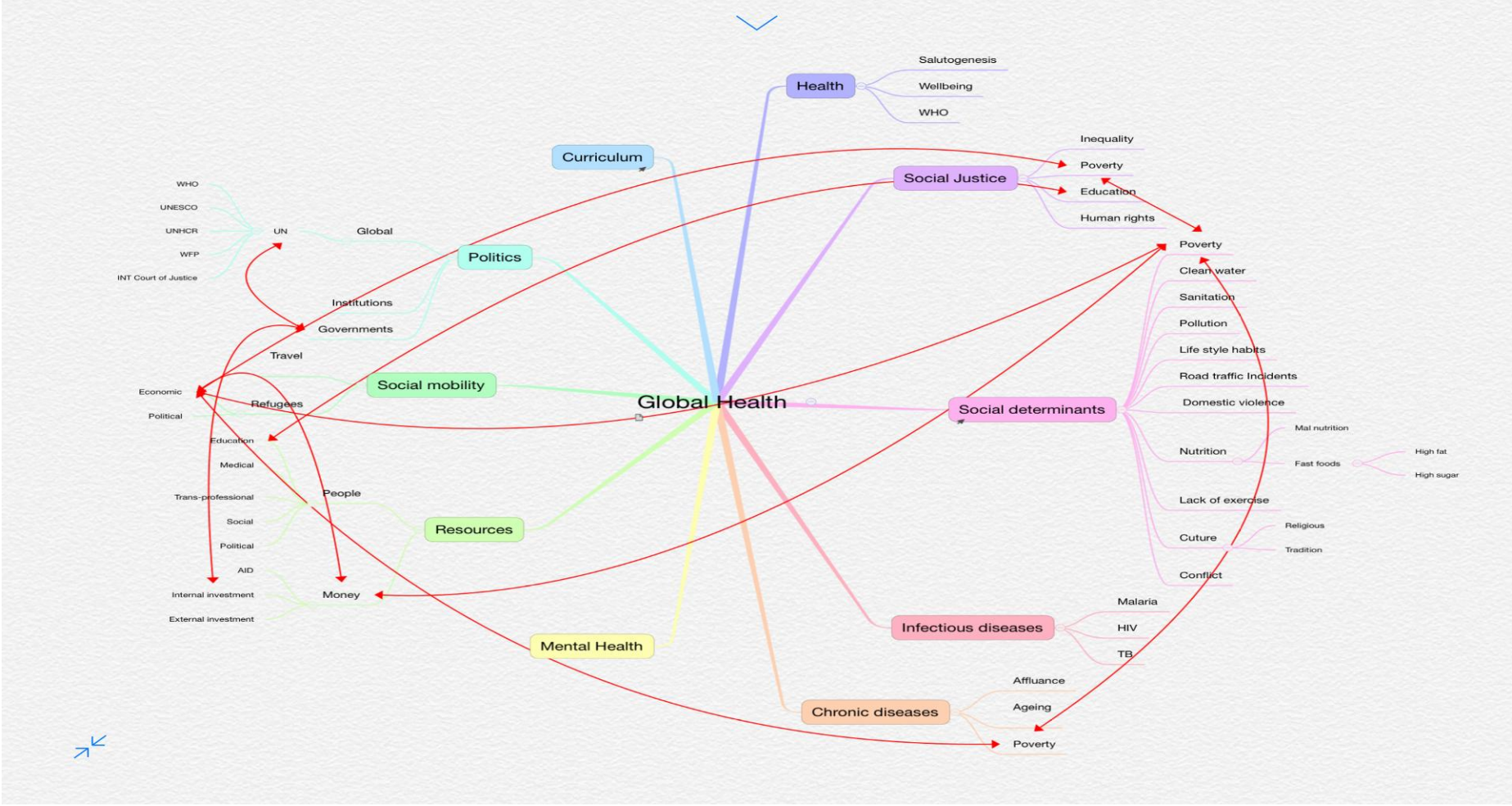
**Appendix 4: Mind maps used in teaching/induction programme**

Mind maps were used during the induction programme in Kenya and several of the teaching sessions/seminars/workshops. The ones included here were the most important for illustration of the theoretical platform for the programme and for illustration of how they were used during the development of the fellows' progress in the GHEFP.

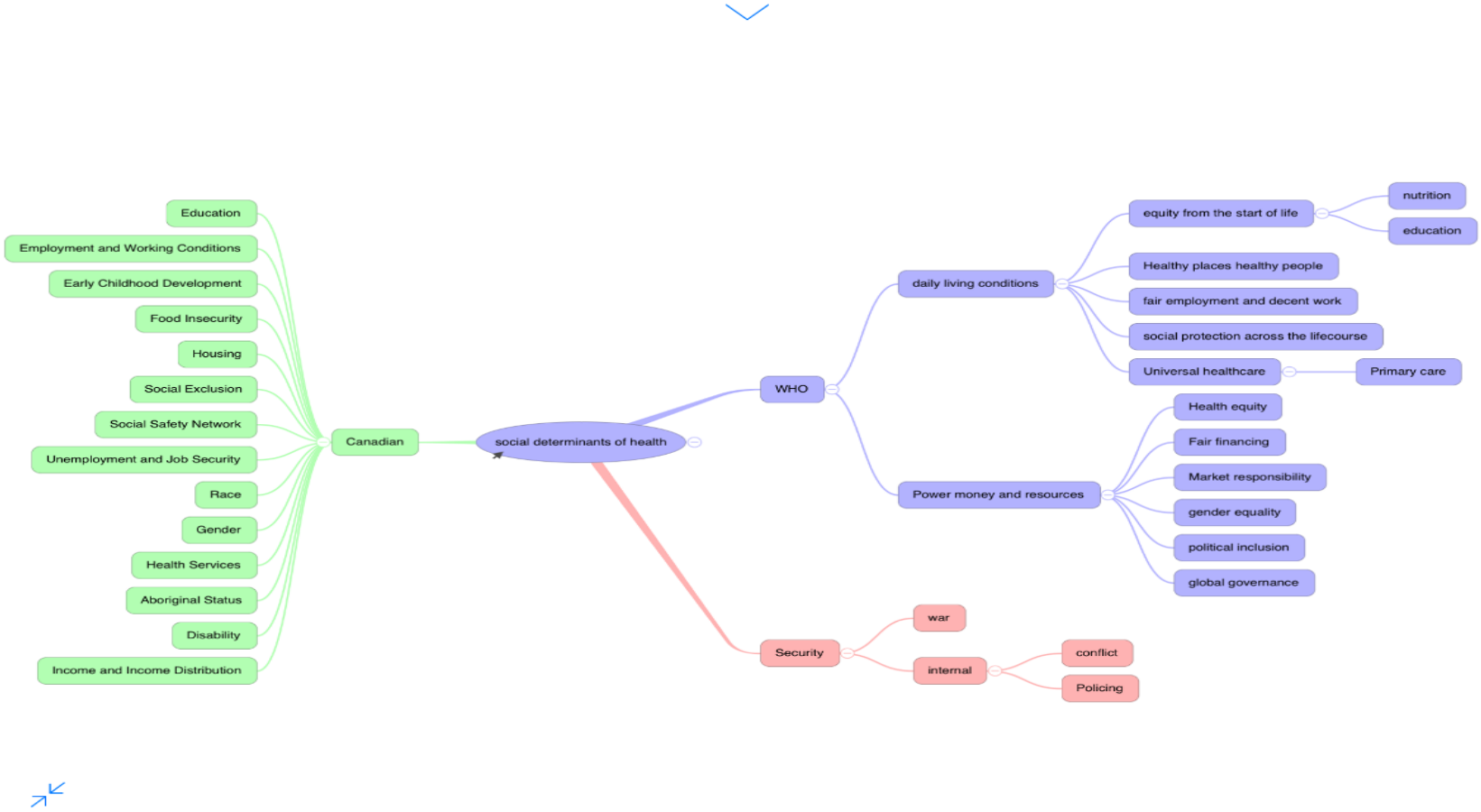
Appendix 4a-1: Mind map of global health as introduced on the first day of the Kenyan induction programme



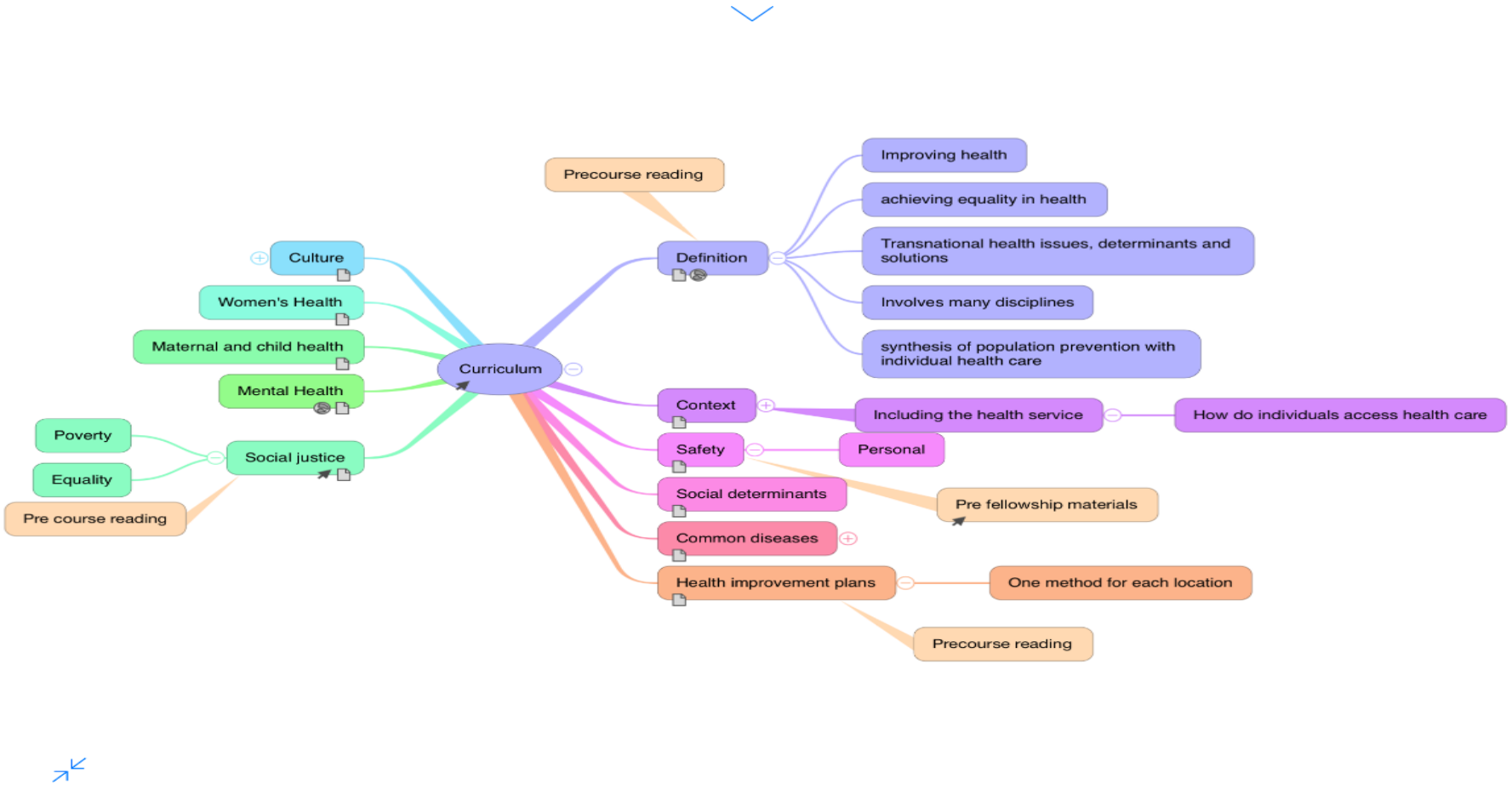
Appendix 4a-2: The mind map of Global health developed with the wider team during the Kenyan induction programme



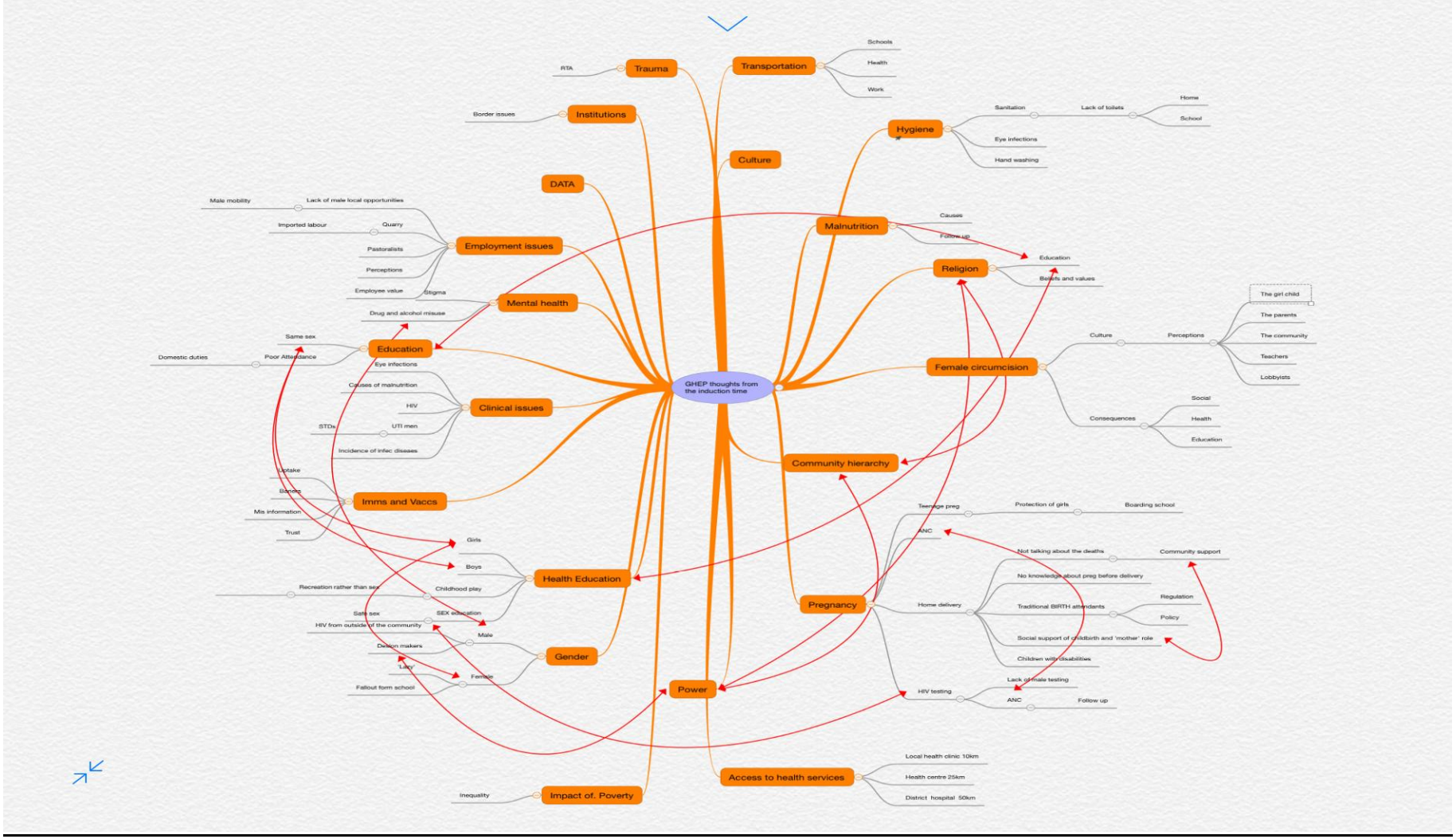
Appendix 4b: Social determinants of health



Appendix 4c: The curriculum for the Kenyan induction programme



Appendix 4d: Thoughts about global health after the first visit to the Kenyan community



**App 5: Budget for the pilot period**

| **Total Costing for Global Exchange pilot project** | | | | | |
|---|---|---|---|---|---|
| Pilot project 13 April 2015 to 30 April 2016 | | | | | |
| Breakdown of Funding costs | Total | | | Actual Cost | |
| | | | | | |
| Local project leads | £ | 2,000.00 | | | £2,000.00 |
| Senior researcher and evaluator | £ | 12,500.00 | | | £12,500.00 |
| Transcription of evaluation interviews | £ | 1,500.00 | | | £1,500.00 |
| Project coordinators Kenya & UK | £ | 2,500.00 | | | £1,500.00 |
| Travel costs for project leads | £ | 6,200.00 | | | £5,832.22 |
| Accommodation & other expenses in Kenya | £ | 1,900.00 | | | £1,659.05 |
| | | | | | |
| Teaching programme expenses | £ | 400.00 | | | £377.03 |
| | | | | | |
| **LETB/Kenyan Trainee expenses** | | | | | |
| Vaccination, Visa, Insurance, medications etc | £ | 1,000.00 | | | £1,178.52 |
| Travel and accommodation etc | £ | 12,000.00 | | | £13,410.42 |
| | | | | | |
| 6m Salary for 2 LETB Trainees * | £ | 30,000.00 | | £ | 30,000.00 |
| | | | | | |
| 6 m living supplement for 2 Kenyan trainees | £ | 5,000.00 | | | £4,865.00 |
| | | | | | |
| Budget Admin | £ | 1,500.00 | | £ | 1,500.00 |
| | | | | | |
| Sundries | £ | 1,000.00 | | | £907.35 |
| | | | | | |
| Patient Centred Care Int Conference Kenyatta Uni | £ | 3,500.00 ** | | | £3,445.91 |
| | | | | | |
| Total | £ | 81,000.00 | | | £80,675.50 |

* The salary for the GHEFP fellows were paid by their employers in the UK and Kenya. The programme was funded by Health Education East Midlands, and the salary for the two UK fellows was therefore included in the grant of £ 78,500

** The Global Health Exchange Fund, Nottingham funded £ 2,500 for the team to participate in the Patient-centred conference, Kenyatta University, Kenya.

| **Appendix 6: The application of the ten empowerment evaluation principles at the two levels** | | | | |
|---|---|---|---|---|
| | Empowerment evaluation principle. | General description of the principle (Fetterman, 2015). | Evaluation of the Fellows' own development in the programme. | The Fellows' work with the two communities. |
| 1 | Improvement | Helping people improve performance. Help people build on their successes and re-evaluate areas meriting attention. | Describing the starting point in the induction programme, and from there identifying needs among the fellows to enable them to do the work in the programme. Learning qualitative research methodology, the fellows were enabled to develop their own method to do the work of the GHEFP. Regular supervision supported the progress and re-evaluation of needs. | The fellows identified perceived health issues in the communities and through qualitative methodology, they developed health themes for each of the communities. Subsequently, they developed a method to allow the members of the community to prioritise their own needs and make recommendations for ways forward. |
| 2 | Community ownership | Valuing and facilitating community control; use | Process evaluation design and regular educational supervision allowing | The method for identification of themes and the engaging |

| | | | | |
|---|---|---|---|---|
| | | and sustainability dependent on a sense of ownership | challenges to be addressed immediately with planned and ad hoc evaluation meetings, surveys, interviews, reflections and diary notes from the fellows, WhatsApp, and email correspondence. After discussion in the core team or with the individual fellow/supervisor we set up responding ad hoc teaching sessions, seminars and workshops as requested by the fellows. The control of the programme's progress was in the hands of the core team as individuals and as a team<br><br>The sense of ownership was not there from the beginning, but the sustainability of the learned skills and insights are all described as | prioritisation method allowed the wider community to decide the content and priorities of the work to come, and to continue the work within the community after the fellows had left. |

| | | | | |
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| | | | transferable to their daily clinical work | |
| 3 | Inclusion | Invites involvement, participation and diversity; contributions come from all levels and walks of life | All involved were invited to contribute with as much feedback and evaluation data as they wanted. This included all stakeholders beyond the wider team.<br><br>The Whatsapp account included all in the wider team, and all information in relation to progress was shared with the wider team. | The fellows collected data about health issues from as many parts of the communities as possible, valuing the ordinary member of the community as well as the community leaders and responsible health officials. They made a huge effort to include all the different groupings in the communities. |
| 4 | Democratic participation | Participation and decision making should be open and fair | All In the wider team were invited and encouraged to participate in the evaluation meetings, teaching sessions and workshops to allow decisions made based on discussions, sometimes negotiations, that everyone in the wider team could live | The voting method was done in collaboration with the community leaders, giving the community not just the results of the prioritisation exercise, but also illustrating a way to work with the community. |

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| | | | with. The Kenyan supervisors were predominantly involved in the Kenyan part of the programme because of perceived relevance, but we could as suggested approach the programme as a wider team for the entire GHEFP in the future. | |
| 5 | Social Justice | Used to address social inequities in society | The fellows were encouraged to progress their work in the programme through the use the capability approach and a definition of global health that includes the wider social determinants | Through Sen's Capability Approach the fellows' focus was on health in relation to poverty, social deprivation and possible sustainable solutions within the available local resources. |
| 6 | Community knowledge | Respects and values community knowledge | AS much as practicalities allowed, the fellows were encouraged to share their knowledge, perceptions and values with the core team to shape | The use of qualitative methods and including as many community members, leaders and stakeholders as possible, the fellows based their entire work on |

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| | | | the development of the programme.<br><br>Many of the teamwork challenges were based on values, different use of language or differences in cultural knowledge. The wider team had to work to sustain the total respect of values and perceptions, but it was in the open that this was the aim | community values and knowledge. |
| 7 | Evidence-based strategies | Respects and uses the knowledge base of scholars (in conjunction with community knowledge) | All the fellows had relevant but different experiences that could support the progress of the GHEFP work. Their knowledge and skills were encouraged to be shared with everyone in conjunction with an induction programme and teaching sessions/workshops/seminars on the state of the art definitions of global health… The sessions also included | Sen's Capability Approach, definitions of global health, social deprivation and poverty and WHO's definition of social determinants (Solar and Irwin, 2010) were used to steer the fellows' work in the community. |

| | | | | |
|---|---|---|---|---|
| | | | teaching on health needs analysis, poverty, social deprivation, capability approach, qualitative research methodology, academic writing, patient-doctor relationship and other relevant topics. | |
| 8 | Capacity building | Designed to enhance stakeholder's ability to conduct evaluation and to improve programme planning and implementation | The fellows learned how to do a health needs analysis, they got the academic theoretical and methodological tools and understanding to plan, implement, analyse and hand over their work to the communities they had been working with | The prioritisations and recommendations from the two communities were handed over to the responsible health officials for their use in developing health strategies and initiatives together with the community members and community leaders. |
| 9 | Organisational learning | Data should be used to evaluate new practices, inform decision making, implement programme | All collected data, including the outcomes of evaluation meetings, supervision sessions and teaching sessions/workshops/seminars were | All the data collected by the individual fellow was used to inform understandings, insights and next steps in their work with |

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| | | practices. Used to help organisations learn from their experiences (success, mistakes, mid-course corrections). | used continuously to understand the progress of the fellows, and to plan and develop the next steps for the support for the fellows' progress. Although some of the planned data collections were planned at the start, halfway and end of the programme, the added ad hoc data collection made it a continuous process. | the communities. The challenges were shared with the stakeholders/community leaders in the community on a continuous basis and the outcomes of the work (the identified themes) were shared with the community firstly for prioritisation and secondly for the development of recommendations based on the community prioritisations. |
| 10 | Accountability | Outcomes and accountability. This included functions within the contexts of existing policies, standards, measures of accountability; Did the | The fellows all succeeded in delivering the expected outcomes as well as added value. The fellows collated and analysed all their data from the two communities, fed back the results, developed recommendations together with the communities and | The communities took an active part in the mapping of the community health issues, and the recommendations that were all sustainable and to a large extent within the available local resources. This work was based on |

| | | | | |
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| | | programme or initiative accomplish its objectives? | wrote a report for each of the communities.<br><br>The budget was held and used appropriately within the agreed framework to support the work in the GHEFP | accepted definitions of global health, poverty and social deprivation and capability approach. The communities benefitted from the work through the insights the GHEFP gave, but also because they were left with the reports to continue the work after the GHEFFP fellows had left the community. |

## Appendix 7: Interview guides for the in-depth interviews

**Interview questions start September-October 2015, directly involved Fellows, supervisors, project leads**

What do you expect from this project?

So far, what are your experiences with being part of this project?
Practically?
Emotionally?
Professionally?

What prior experiences do you have working with global health?

In the project description, it says "Making global health real", how do you think this is going to happen?
What will be the impact of the project on global health issues, do you think?

When you think of "socially deprived areas" what pictures do you get?

In what way do you see the following interrelated: Health, poverty, social care? Examples?

What do you think will be the benefits of your participation/leadership?
- knowledge
- skills
- attitude/understanding
Examples?

What do you think will be the challenges in taking part in this project?
-culture
- financial
- academic
Examples?

Which problems do you think are the most important health issues in [the Kenyan community], [the UK community]?

In what way do you learn the most/the best? (for project leads, what are your preferences in relation to teaching style and formats?) Examples?

There are different kinds of support, educational and clinical supervisors and project leads attached to your participation in this project. What do you think you are going to need the most support for?
(For project leads and supervisors: what do you think they will need the most support for?)

How would you describe yourself in relation to problem-solving as a skill? Examples?

How would you describe yourself concerning making professional partnerships? Examples?

You will be working with your family medicine colleagues, who else do you think will be important to work with during the project?

Have you ever done a needs assessment before, describe?

How do you feel about the academic side of this projects, that you will end the project by writing a report with a view to publishing it?

**Interview questions halfway November 2015,**
**directly involved Fellows, supervisors, project leads**

**About individual learning and support**

So far, what are your experiences with being part of this project?
Practically?
Emotionally?
Professionally?

Being part of this programme, has anything surprised you?

What is the most important thing you have learned, being part of the programme? Have you learned something about yourself during your participation in this programme?

So far, what would you say have been the biggest challenges in taking part in this project?
-culture
- financial
- academic
Examples?

Thinking of the time in the programme, how would you describe yourself in relation to problem-solving as a skill? Examples?

Thinking of the time in the programme, how would you describe yourself concerning making professional partnerships? Examples?

There have been different kinds of support, educational and clinical supervisors and project leads attached to this project. So far, what kind of support has been the most important for you
(For project leads and supervisors: what have you seen as the most important support for the fellows?)

**About global health**

In the project description, it says "Making global health real", do you think this has happened during the period you/the fellows have worked in [the Kenyan community]? In what way?

If you were to write three sentences about the outcome of your work in [the Kenyan community], what would the three sentences be?

What will be the impact of the work in this programme on global health issues, do you think?

**About [the Kenyan community]**

[the Kenyan community] is described as a socially deprived area. In what way would you describe it as socially deprived?

In [the Kenyan community], how would you say that health is related to poverty and social care?

Which problems do you think are the most important health issues in [the Kenyan community]?

**Interview questions end March 2016,**
**directly involved Fellows, supervisors, project leads**

We are at the end of the pilot project. How do you feel it has been to be part of the project.

There have been many roles to fill, which of the roles you have had do you think have been the most important for the programme?

Has anything been different than you expected? Any surprises to or confirmations of what you expected? Practically? Emotionally?professionally?

Based on your experiences, if you were to continue the programme, is there something you would like to change?

In the project description, it says "Making global health real", do you think this has happened, in what way? Has it had any impact on global health issues, do you think?

[the Kenyan community] and [the UK community] were chosen as "socially deprived areas". If you were to choose areas for this project again, would you have chosen the same areas? Why?

In what way would you say that you have contributed the most to the project?
- knowledge
- skills
- attitude/understanding
Examples?

What do you think have been the challenges in taking part in this project?
-culture, - financial, - academic, Examples?

Which problems do you as a health professional think are the most important health issues in [the Kenyan community], in [the UK community]?

There have been different kinds of support, educational and clinical supervisors and project leads attached to your participation in this project. What do you think has been the most important support in this project?

How do you feel about the academic side of this project?

The project has been evaluated at different levels and with many perspectives:

**Content evaluated:**
The fellows should:

- gain global health-related problem-solving skills
- develop professional international partnerships
- produce some sort of academic output

**Process issues evaluated:**
The project should ensure

- Practical and academic support to enable the fellows to obtain the outcomes of the programme
- Integration of stakeholders, culture and other contexts important to the programmes success

Based on your experiences with the programme, is there anything you would like to add in relation to the content or the process?

## Appendix 8: Questions asked in the repeated short surveys for the fellows

**At the beginning of each of the two placements the fellows were asked the following questions:**

- Right now, how do you feel about the programme? Please also write why you think you feel this way.
- What do you think about the [Kenyan/UK] induction programme in general? Please give details and examples, thanks!
- What do think about the [Kenyan/UK] induction programme? Please reflect on 1. the structure 2. the content (3. participating in the conference at The K-University).
- How did you find your stay at [the list of the accommodation places during the induction]? Please write a little for each of the accommodation sites (this question only in Kenya, where we moved around a lot).
- We have shared theoretical sessions as well as practical methodological and social sessions. Was anything in the induction programme particularly helpful for you? Please don't reply just "yes" or "no" or single word answers, but reflect and give details and examples. Thanks!
- Was anything in the induction programme particularly unhelpful for you? Again, please write more than just yes or no. Thanks!
- So far, what has been the most surprising or unexpected experience for you as a global health exchange fellow in [UK]? (UK question only)
- So far, what is/are the most important learning point(s) you have gained as a Global Health Fellow? (UK question only) So far, is there anything that has been particularly difficult in your work as a Global Health fellow? Please describe the difficulty and how you have approached it? (UK question only)
- How would you describe your relationship with the other fellows of the programme?
- In a few sentences, what are your thoughts about the four of you working as a team?
- Have you got any concerns or worries about your continued participation in the programme?
- Do you have any other comments in relation to the induction period or the Global Health Fellows Exchange project ? Again, if there is something you find difficult to write here, you are very welcome to write to Charlotte at tulinius@sund.ku.dk

**Halfway in the programme at the end of the work in the Kenyan community, these questions were asked:**

- Right now, how do you feel about the programme? Please also write why you think you feel this way.
- What has been the most surprising or unexpected experience for you as a global health exchange fellow in Kenya?
- What is the most important learning point(s) that you have gained as a Global Health Fellow?
- So far, is there anything that has been particularly difficult in your work as a Global Health Fellow? Please describe the difficulty and how you have approached it.
- How would you describe your relationship with the other fellows of the programme?
- In a few sentences, what are your thoughts about the four of you working as a team?
- Do you have any suggestions for changes/improvements to the Global Health Fellows Exchange programme? Please also explain the background for your suggestions.
- We will soon meet for the halfway evaluation meeting. Is there something you would like me to take up at this meeting?
- Do you have any other comments for me and the other project leads?

**At the end of the programme, these questions were asked:**

- Right now, how do you feel about the programme? Please also write why you think you feel this way.
- What has been the most surprising or unexpected experience for you as a global health exchange fellow in Kenya?
- What is the most important learning point(s) that you have gained as a Global Health Fellow?
- Has anything been particularly difficult in your work as a Global Health Fellow? Please describe the difficulty and how you have approached it.
- Has anything been particularly interesting/enriching for you as a health care professional? Please describe what and how it has interested/enriched you as a health care professional.
- Will any of your learning from the Global Health Exchange programme be useful for you in the future as a professional (GP/family doctor/clinical officer)? Please describe what and in what way it will be useful for you in the future.
- How would you describe your relationship with the other fellows of the programme?
- You have had different kinds of supervision and facilitation to support your learning throughout the programme. Please comment on the usefulness of the following: Induction programme in Kenya - Social programme in Kenya. - Educational supervision in Kenya
- You have had different kinds of supervision and facilitation to support your learning throughout the programme. Please comment on the usefulness of the following: Induction programme in the UK - Social programme in the UK - Educational supervision in UK Writing seminar in the UK
- The project has been process-evaluated with interviews, requests for reflective pieces and surveys like this to enable immediate change and tailored support for you as fellows and the programme as such.
- Do you think we have succeeded in reacting appropriately on the feedback you have given. Please give an example.
- The learning objectives of the programme state that you as a fellow should gain global health-related problem solving skills. Would you say that you have gained this? Please also describe why you think so.
- The learning objectives of the programme also state that you as a fellow should develop professional international partnerships. Would you say that you have done so, and please describe with whom and the character of your relationships?
- Finally, the learning objectives of the programme state that you as a fellow should gain academic skills and produce some sort of an academic output. Would you say that this is true for you? Please describe your new skills and the output produced.
- Would you recommend your peers/colleagues to join a Global Health Exchange Programme similar to the one you have participated in? Please also describe why.
- Based on all your experiences with the programme, is there anything you would suggest changed if this programme were to be run in the future for people like yourself?
- Do you have other comments?

**Supervisors' survey monkey questions were:**

- Right now, how do you feel about the programme? Please also write why you think you feel this way.
- What do you think about the induction programme in general? Please give details and examples, thanks!
- What do think about the induction programme? Please reflect on 1. the structure 2. the content 3. participating in the conference at Kenyatta University.
- How did you find the stay at CHAK, PUEA, Safari Park Hotel, Amboseli Kibo Lodge? Please write a little for each of the accommodation sites.
- We have shared theoretical sessions as well as practical methodological and social sessions. Was anything in the induction programme particularly helpful for you? Please don't reply just "yes" or "no" or single word answers, but reflect and give details and examples. Thanks!
- Was anything in the induction programme particularly unhelpful for you and/or the fellows? Again, please write more than just yes or no. Thanks!
- How would you describe your relationship with the current fellows of the programme? With the other project leads and supervisors?
- In a few sentences, what are your thoughts about the four fellows working as a team?
- In a few sentences, what are your thoughts about your role in the programme?
- Have you got any concerns or worries about your continued participation in the programme? Have you got any worries or concerns about the fellows' continued participation?
- Do you have any other comments in relation to the induction period or the Global Health Fellows Exchange project? Again, if there is something you find difficult to write here, you are very welcome to write to Charlotte at tulinius@sund.ku.dk

**Appendix 9: Health priorities in the two communities**

| Kenya | UK |
|---|---|
| Access to healthcare | Education |
| Maternal and Child Health | Poverty |
| Sanitation and Hygiene | Mental Health |
| Infectious Diseases | The Youth |
| The Girl Child | Access to Health/Social Services |
| Nutrition | Drug and Substance Misuse |
| The Boy Child | Environmental |
| Poverty | Nutrition |
| Culture | Gender Inequality |
| Gender Inequality | Infectious Diseases |
| | Non communicable diseases |
| | Culture |

**Appendix 10: UK community health needs' themes described and recommendations**

This appendix is an excerpt from the fellows' UK report, adapted into an anonymised format.

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In the WHO model of health, the socioeconomic determinants are regarded of equal importance to the biomedical elements. These themes and the recommendations reflect this model in their complexity and overlap. The recommendations for each theme are not presented in order of importance.

***Education***

Voted by the community as the most important theme in [the UK community], education is seen as the way to increase an individual's and therefore the community's capability to make informed and real choices to develop physically and spiritually.

This is through the many formal and informal opportunities and through local leadership. Language and attitudinal problems are felt to be the major factors. This theme also applies to adults, who we have found have many difficulties through language and literacy.

*Recommendations*

1. Widen the use of the child in formal education as a mediator of literacy skills to their parents.
2. Offer general educational classes for parents in parallel with their child's.
3. Incorporate relevant health education and health professionals into the formal education curricula.
4. Incorporate the concept of the Capability Approach into the formal and informal educational programmes.
5. Recognise and support early childhood learning programmes as part of the normal formal educational programme.
6. Incorporate a child counselling service into the schools to handle personal and family problems that impact on learning and behaviour (as per the [the UK community] XX Primary School).

***Poverty***

Poverty, financial and spiritual, undermines the individual's capability to make the choices that will support their well-being.

In this community it is multi-factorial with cultural practices preventing women from having financial independence, unemployment and refugee status amongst others. Employment practices such as the zero-hours-contracts perpetuate the poverty trap. The communication between the benefits agency does not reflect the reality of a life of poverty.

*Recommendations*

1. Organise the movement of young children from schools to the after school facility, (XX Community Centre) to enable parents to be employable or complete a work day.
2. Extend the after school facility to cover the full working week.
3. Promote the extension of the welfare rights advisers into the primary medical care settings, schools, and community centres.
4. Support the development of jobs that do not use the zero-hour-contract.
5. Develop a communications strategy that takes into account the living circumstances of those in poverty to ensure their human rights to welfare support are not breached.
6. Investigate methods to explore ways of identifying and using the skills of refugees before their residency status is confirmed.

***Mental health***

Mental ill health is perceived as a major problem, is probably under reported and is influenced by living conditions, life prospects, substance misuse and personal trauma as refugees or in the home. Access to services and support was seen as a significant part of the problem.

*Recommendations*

1. Employ counsellors in schools to help manage chronic low level of self-esteem and antisocial behaviour.
2. Increasing the awareness of and access to the existing mental health support services in the professional and voluntary sectors, with emphasis on non English speakers and those with literacy problems.
3. Develop a more effective community strategy to manage isolation and loneliness in the elderly and the marginalised, including refugees.

***The youths (ages 13 to 19)***

The young people of [the UK community] are a vulnerable group, who may lack the guidance and support, needed at this time of their life. This can be present in terms of antisocial behaviour, substance misuse and early pregnancy.

*Recommendations*

1. Increase the opportunities for youth for team sports and purposeful recreation to develop self esteem and skills.
2. Encourage local employers to increase the number of apprenticeships.
3. The use of [the UK community] role models past and present to inspire, encourage aspirations and imbue a sense of local pride.
4. There is a need for a further investigation of the dynamics of teenage pregnancy as seen from the teenage mother's perspective.
5. For the teenage parents encourage school and community based parenting classes including sexual health and practices.

***Access to health and social services***

One of the major barriers to access all services is language. For the most part this means an inability to communicate in English. There are reported to be a significant number of residents in [the UK community] who are illiterate in any language. This again restricts access, particularly through written communication.

*Recommendations*

1. Encourage and support existing voluntary services that promote improved language skills.
2. Encourage local health professionals to engage with the community organisers to deliver appropriate and responsive services that adapt to a changing community.
3. Promote the dissemination of information about services and facilities through a number of different media.
4. Explore the development of a service that enables effective translation for service users and providers.

***Drug and substance misuse***

Drug and substance misuse is widespread with cannabis use becoming increasingly socially acceptable. Local shops provide low cost, high strength alcohol, and drugs are easily available. The use of both is rationalised as a response to poor living conditions and low self esteem.

*Recommendations*

1. Improve the security of public places and parks where drug dealing and other antisocial behaviour inhibits full use.
2. Explore the possibility of an outreach programme about substance misuse to those who do not attend schools
3. Explore the culture of the acceptance of cannabis use as normal behaviour.

***Environment***

Air pollution is thought to be due to heavy traffic emissions especially along the main street. There is a concern from the community with regards to the nearby (industrial processing unit).

Residents report that pathways are polluted by dog faeces, spittle and general litter. There was concern raised of poorly maintained housing, damp and overcrowding.

*Recommendations*

1. Encourage greater use of cycles within the schools and the adult population.
2. Reinstate regular community cleaning campaigns for the streets and parks.
3. Make the results of current air pollution monitoring publically available and increasing awareness of methods to reduce pollution.
4. Consider a review of the housing conditions in [the UK community] and enforcement of public health regulations.

***Nutrition***

Nutrition was discussed by many as a factor contributing to poor health. There is a reported misunderstanding as to what constitutes a balanced diet.

*Recommendations*

1. Encourage educational activities that promote healthy food and cooking with children and parents.
2. Encourage more exercise facilities and activities for all ages.
3. Explore the possibilities that encourage children to buy healthy food.

***Gender inequality***

An inequality between women and men can be built into relationships and culture. It becomes of concern when this manifests through domestic violence. This is thought to be present and under reported.

*Recommendations*

1. Develop systems to improve the referral rate of incidents of domestic violence to Women's (support groups).
2. Promotion of education for both sexes and all ages that creates awareness of the boundaries within relationships that reflect human rights.

3. Promotion of the awareness of the services available to those who are subject to domestic violence.
4. Increase in women only exercise opportunities.

***Communicable diseases***

These include diseases passed from person to person. They are increased through poverty and overcrowding, and include sexually transmitted infections, HIV, TB and skin infections.

*Recommendations*

1. Increase the frequency of HIV testing on all new patients at registration.
2. Increasing the number of trained volunteers able to supply C cards and sexual health advice.
3. Consider a review of the housing conditions in [the UK community] and enforcement of public health regulations.

***Non-communicable diseases***

Smoking and lack of exercise are the major risk factors implicated in chronic cardiovascular and pulmonary disease.

*Recommendations*

1. Explore regulatory ways to enforce schools as non smoking areas.
2. Promote walking groups for all ages.
3. Encourage cycling groups to schools.

***Culture***

Diversity in [the UK community] creates a richness of culture that provides both strengths and weaknesses within the community. It also hides certain practices that result in domestic violence, child and elder abuse. First cousin marriages may be culturally acceptable but lead to babies being born with chromosomal abnormalities. Other examples where difficulties may be encountered include the cultural importance of education and gender equality.

*Recommendations*

1. Support initiatives that encourage people across cultures to engage in Community Development programmes.
2. Community leaders to be aware of the problems of children born to first cousin marriages.
3. Use the strengths of the different ethnic communities to develop the [the UK community].

**Appendix 11: Kenyan community health needs' themes described and recommendations**

This appendix is an excerpt from the fellows' Kenyan report, adapted into an anonymised format.

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This summary is presented according to the Themes we defined and in the order they were prioritised by the community representatives. As health care professionals it is important that we listen to and respect the views of the community and are able to contribute our observations and conclusions on areas we also feel are important.

The recommendations are what we feel would improve the health of this community. They are addressed to the community leaders, the local health planners and providers and to individuals.

We have used the WHO definition of health and well-being and have used their framework to discuss our findings and we have applied the principles of the Capability Approach in the analysis and recommendations.

### *1.1 Access to health care*

1.1.1 The poor access to health care in the [the Kenyan community] community is due to a combination of lack of staff and lack of functioning facility. The current health professional is employed by the community with funds from the xx Trust, a United Kingdom grant body for only a year. The dispensary buildings are functioning as accommodation for secondary school teachers and the Health Centre building ... is unfinished. The roads to these buildings are very poor as are the roads out to the highway. There is currently a possibility of using solar panels ..... to power a vaccines fridge. Training in good immunisation practice can be provided by XX county.

*Recommendations*

1.1.2 Establishing the existing dispensary building for Immunisations, family planning services and ante natal clinic with a health professional based in [the Kenyan community]

1.1.3 Negotiations to resume between Community, XX county, and XX [funding institution] to ensure completion of existing Health Centre in [the Kenyan community], with

a view to completing and commissioning the building of [the Kenyan community] Health Centre.

1.1.4 Build and maintain better roads to the schools and the Health Care facilities

### *1.2. Maternal and Child Health*

1.2.1. There is poor data about the number of and outcomes from pregnancy in [the Kenyan community]. Care during pregnancy is haphazard and opportunistic. Most of the babies are delivered at home with traditional birth attendants (TBAs). The TBAs are keen to receive further training and are the *de facto* source of intra-partum care until the health centre facility (1.1.1) is commissioned. Poor and costly travel facilities deter patients from using the nearest staffed facilities.

1.2.2 Unplanned pregnancies in girls are common and because of the shame receive little or no pregnancy care.

1.2.3 HIV programmes for pregnant women and their babies is patchy in its implementation.

1.2.4 Home delivery, postnatal practices and costly travel mean that babies do not receive their early immunisations.

1.2.5 Knowledge about safe-sex and contraception is poor across all age groups.

*Recommendations*

1.2.6 A systematic community based pregnancy care service.

1.2.7. Support for existing traditional birth attendants (TBA), by providing training and provision of sterile supplies whilst waiting for the Health Centre services to be implemented.

1.2.8. Systematic sex education in the community.

1.2.8.1 Inclusion of sex education in schools, including “safe sex”

1.2.8.2 Introduction of sex education teaching to youth groups.

1.2.8.3.Safe sex teaching to Women’s groups - to allow them to then educate their children and husbands

1.2.8.4.Equip [the Kenyan community] health professional with family planning resources

1.2.4. The development of a Child Immunisation service in the community

1.2.5. Work with community groups of women, and aim to empower women through education including adult literacy classes

### *1.3. Sanitation and hygiene*

1.3.1. The water that is piped into the community is not safe for drinking and there is no evidence of testing. The culture of hand washing or water purification is not seen across the community. Despite the recent campaign latrine facilities are not available throughout the community. The potential health hazards of impure water and safe removal of human faeces is not fully understood. There is an existing Water Maintenance Committee.

*Recommendations*

1.3.2. Community health educators should put more emphasis on hand washing, water treatment and proper waste disposal be it water or human excreta.

1.3.3. The available school teachers, community health workers, the church fellowship and groups should be used as a source of knowledge and example on good sanitation practice, through school, centre and outreach programmes.

1.3.4. The few graduates from the community who have studied health related courses such a public health could be mentors and examples for the community.

1.3.5. To develop and promote the low tech and appropriate water purification systems, UV light, filters and Chlorine drops.

1.3.6. The existing water maintenance committee to publically inspect and report on the cleanliness of the river and the five water points.

1.3.6. Promote the examples of the initiatives to teach ...children to use water filters and hand-washing.

1.3.7 Adopt clean water practice policies at the schools.

1.3.8 Need to consider the role of an indigenous public health officer who can relate to the community and has their trust.

1.3.9 Develop and sustain the existing programme of each household having a toilet

1.3.10 Consider the building of Composting Toilets as will be built at the Secondary School

### *1.4. Infectious diseases*

1.4.1. The Infectious Diseases which are of concern to the Community are HIV/AIDS, other Sexually Transmitted Infections, Malaria, Typhoid, Diarrhoeal Diseases like Dysentery

(particularly among the young), Respiratory Tract Infections (again especially affecting young children), eye infections and skin diseases.

There is no systematic data about HIV and other sexually transmitted diseases although they are cause for concern and misunderstanding. Cultural interpretations of HIV, its causes and consequences have led to poor uptake of testing and treatment, particularly the concept of the curse. There is an indication of a change in understanding in the women's group. There is also an increase in other sexually transmitted diseases and a reliance on herbal cures. The culture and practice of early sexual activity, polygamy, wife sharing and a thriving sex trade in [the nearby town] are all contributory factors to understanding and managing this problem.

1.4.2 Water borne diseases (see Sanitation and Hygiene above) are common, well known but poorly understood in terms of self protection.

1.4.5 Eye infections are common in children and respiratory diseases are common in all ages.

*Recommendations*

1.4.6 Through culturally sensitive exploration and education to develop a better understanding of HIV and its consequences amongst the elders and the Pastors and other community educators. There is a need for inter-church collaboration to encourage consistency and effectiveness of health messages.

1.4.7. The provision of HIV services in the Community, ( [the Kenyan community] health professional is undertaking training at the time of writing).

1.4.8. Community leaders to promote the use of condoms.

1.4.9. A systematic community based pregnancy care service (see 2.1 above).

1.410. Educate households about the hazards and consequences of internal biomass cooking with regard to respiratory infections as well its impact on Maternal and Child Health.

1.4.3. There is a need for more understanding of the causes and management of eye infections.

### 1.5. The Girl Child

1.5.1. It is important to note that while this was not considered by the community representatives to be one of the “Very Important” issues, it does raise areas of concern for us as healthcare professionals and was raised again (by a member of the community) during the Community Feedback meeting. The issues relating to the girl child range from school attendance, early pregnancy, female circumcision, early marriage and menstrual hygiene problems.

*Recommendations*

1.5.2 Appropriate safe sex education and the use of condoms

1.5.2. Improve school attendance by increasing the understanding of the importance of education amongst parents and community leaders.

1.5.3 To explore ways of incorporating educational activity with domestic learning and duties

1.5.4. Ensuring training (for boys and girls) and supplies to manage menstrual hygiene

1.5.5 Empower girls to express their wishes and concerns about FGM and early marriage

### 1.6. Nutrition

1.6.1. Evidence of malnutrition was seen and reported. It results from a combination of poor knowledge about a good balanced diet, availability of appropriate foods, the capacity to buy and the adoption of new farming practices. It is a major factor in promoting health and education in children, during pregnancy and in later life.

*Recommendations*

1.6.2 Specific education of parents about balanced nutrition.

1.6.3. Explore new possibilities for income generation by women to enable them to buy good food.

1.6.4. Increasing the sources of food products through home production.

1.6.5. Using innovative farmers as mentors to the community

### 1.7. The Boy Child

1.7.1. One of the unintended consequences of concentrating on educating the girls has been to relatively neglect the boys. Many of the issues are common to both boys and girls such as sex and school attendance.

*Recommendations*

1.7.2 To explore the possibility of education about sexual behaviours and gender physiology being done to inform both girls and boys either as single sex or in mixed groups.

1.7.2. To explore ways of incorporating educational activity with pastoral duties.

## 1.8. Socio-economic determinants of health

1.8.1. It is a general understanding within the community that health is about the absence of disease, and it is achieved through treatments prescribed by health workers or performed in hospitals. The concept of there being social and economic factors that determine health is new and not often part of proposed solutions.

1.8.2 Poverty is one of the major social determinants and there is need to change the community's perception of what poverty is, since most of the community residents have herds of cattle and goats which are not seen as assets that could be used to provide more health living, such a building toilets or buying more nutritious food. The quarry is a source of both income and material for building toilets.

*Recommendations*

1.8.3 The community to explore their resources that can be used to modify and manage the social determinants of their health.

1.8.4 The schools to establish health clubs that will identify the social determinants of health within the school and the community and create a process, through the Schools Student Councils, to inform the community leaders.

## 1.9. Culture

1.9.1 Culture is the way that we do things in our everyday life, usually in groups and it is usually the way groups are identified as different. Because it is everyday life if is often not seen as special. In some cultures such as that of the [people in the Kenyan community] the differences are highly regarded and seen as normal and identifying behaviour. It is often difficult to identify from within cultural factors that result in ill health, and these factors are equally difficult to explore sensitively from the outside. However, it is important to do so for both the community and the health professionals to work together with a common aim and without prejudice to find common solutions. This is especially so in the current problem area of HIV, but equally so in topical areas such as getting a full educational experience and eating a well balanced diet.

*Recommendation*

1.9.2 Ensure that all health related problem areas or initiatives are explored in a culturally sensitive way prior to implementing agreed interventions.

## 1.10. Gender inequality

1.10.1 Gender inequality is not recognised probably because of culture and practice. Examples of the girls not being able to fully express their concerns and choices about circumcision and early marriage and the reports about domestic violence indicate that it exists.

*Recommendations*

1.10.2 To begin a process of exploring the problem of recognition of gender inequality and the positive effects to the community when these problems are identified and managed, for instance education access and completion,

1.10.3 Complete and staff the Girls Refuge Centre and explore how to integrate it into the local education system.