Scotland Chikwawa Health Initiative
Targeting Environmental and Maternal Health Issues from Community to Health Facility Level

The University of Strathclyde, University of Malawi and Chikwawa District Health Office have had a long standing relationship of cooperative research, academic exchange and implementation of health intervention programmes in the area of environmental health. On the basis of this relationship, they have been working together to improve health from village to district level. This programme was specifically designed to address the Government of Malawi Essential Health Package and maternal health and healthy settings needs therein.

Located in the rural District of Chikwawa, The Scotland Chikwawa Health Initiative (SCHI) began working Chikwawa District Health Office and 4 pilot communities in 2006. The programme, primarily funded by the Scottish Government International Development Fund, has now worked with over 150 communities and nine health facilities to develop a holistic approach to the prevention of disease, improved health access and maternal health.

The programme arose from the needs highlighted by communities during research in areas of diarrhoea disease control, water and sanitation and child health. Launched in 2006 the key objective of the SCHI continues to be the need to achieve measurable reductions in the main causes of disease and death in Chikwawa District, while improving health access and the hospital environment for both patients and staff.

The SCHI has developed an integrated approach to training, community education and capital investment to maximise the impact of the District Health Office in the implementation of the Essential Health Package. All of our work is conducted in partnership with the District Health Office and communities to develop sustainable interventions and programmes. The programme has concentrated on addressing the social determinants of health and to improve maternal health services and address the high maternal and neonatal mortality rates in the area.

Specific areas of focus for SCHI
Since 2006 SCHI has worked with six traditional authorities implementing Scottish Government funded projects

- 2006 – 2009: To achieve measurable reductions in the main causes of disease and death in 4 pilot villages through preventative health measures.
- 2009 – 2010: Improve maternal health services for 35 villages in Chikwawa District.
- 2010 – 2013: To improve maternal health services in the remote rural areas of TA Chapananga.
- 2013 – 2016: Implement the healthy setting approach in Mfera Health facility catchment area.

The programmes consists of three primary components:

- Training and education of community members to empower them to effect development and implement village action plans through a participatory approach.
- Training and development of health surveillance assistants and centre based health workers to improve access to services and support community members.
- Capital investment at community and health facility level to improve access to health services.

Summary of activities to date:

Capital investment:
- 6 staff houses for varying cadres of government health staff (DNO to HSAs)
- 5 community health posts and clinics.
- 3 guardian/ waiting mother shelters at remote health facilities.
- Provision of 3 solar powered and rehabilitation of one water supply at health facilities.
- 18 bed nutrition rehabilitation unit at Ngabu Rural Hospital with beds.
- Maintenance and repair of health facilities to improve health facilities.
- Medical equipment and uniforms (various both donated and procured).
- Bicycle ambulances and bicycles provided to communities and HSAs to improve health access respectively.
- Provision of 2 motorbikes to health facility staff to improve services and supervision.
- Support of nursing staff to upgrade from diploma to degree qualifications.
These have facilitated improved health service provision at health facility and community level when integrated with training and education. 

Training of community based health surveillance assistants who now provide the following services at community level:

- Training and support in community mobilisation for maternal health and social determinants of health.
- Supervision and management of voluntary committees to improve empowerment and accountability (e.g. village health and water point committees)
- Integrated management of childhood illnesses and community case management.
- HIV testing and counselling.
- Supervision and provision of family planning services.
- Supervision and management of maternal health programmes (CBMNH)
- Supervision and management of growth monitoring and supplementary feeding programmes.
- Youth friendly health services.

These services are supported by the construction of associated health posts and HSA housing.

Training and development of communities: 
The SCHI approach to community development based on the participatory approach, taking into consideration the priorities and needs of community members from all socio economic groups. This approach looks at all social determinants of health without a specific agenda and looks to then empower community members to address their needs and use resources available to them effectively. As such, there have been a number of areas of community capacity building to date:

- Empowerment and mobilisation of communities through all groups and leadership.
- Training and continuing development of village health, water point, and safe motherhood committees.
- Development of model houses for committee members from which to educate peers.
- Provision, repair and improvement of community water supplies.
- Training and provision of materials for committees to construct improved sanitation facilities.
- Provision of mosquito nets and water treatment through committees.
- Development of revolving funds for community health development.

Integration with other groups:
As the programme is based on a link between academic institutions and government, an important aspect of the SCHI has been the development and exchange of academic staff and professionals to improve capacity within the University of Malawi and the environmental health profession in Malawi.

Since 1997, the Department of Environmental Health has been involved in three British Council Higher Education Links and DelPHE programmes, as well as professional and academic scholarships from the Association of Commonwealth Universities. This has culminated in the development of the Centre for Water, Sanitation, Health and Appropriate Technology (WASHTED) at the Malawi Polytechnic, and the relaunch of the Malawi Environmental Health Association.

SCHI has played an integral role in these developments. Academics from the University of Malawi have based their research at both PhD and Masters level on the work undertaken by the programme, (2 graduated PhD, 2 graduated MPhil, 2 graduated MPH, 3 currently undertaking PhD). These have included departments of environmental health, mathematics, and engineering. The environmental health professionals from Chikwawa District have also had an opportunity to visit Scotland for professional fellowships.

In addition to the capacity building within partner organisations, SCHI is aware of the importance of working with other organisations within the same field and geographical area. With this in mind, SCHI assisted Chikwawa District Health Office in the development of their Safe Motherhood Task Force, which allowed all organisations to work together with a coordinated approach to ensure best use of resources. The programme also links with other organisations which have linked activities but by subject ad geographical location. For example, Water for People, Malawi Liverpool Wellcome Trust, Centre for Victimised Women and Orphaned Children (CAVWOC), SSDI, Millennium Development Villages etc. The CREP programme from University of Strathclyde also integrated with SCHI to develop solar
systems to assist with the provision of health services in community based health facilities.

Impact of projects:
Various reports are available which outline the specific outcomes and impact of the SCHI programmes since 2006. These are also documented in professional and peer reviewed publications (list attached). As a result of the work conducted by SCHI, we have also been involved in the development of policy informing documents at National level, such as:

- Policy brief for Towards and Integrated Approach for Diarrhoal Disease Control in Malawi in partnership with the Ministry of Health and PATH (http://www.path.org/publications/files/VAC_malawi_policy_fs.pdf)
- Situation Analysis for Food Safety in Malawi in partnership with the Ministry of Health and WHO.

The work of the SCHI has also been presented at the Annual Sector Wide Approach Review meeting in 2013 and a number of international conferences.

Current Projects and Future Developments:
SCHI is continuing to work with the District Health Office and Ministry of Health to achieve its goals in Chikwawa. The current area of concentration is the development of a Healthy Settings Approach which can meet the needs of the Health Sector Strategic Plan for preventive health targets.

This is being implemented in a pilot area on the East Bank of Chikwawa District around Mfera Health Facility. Targeting a population of 7500 people in 18 villages, the project is exploring the assessments of community needs using both qualitative and quantitative methods and with a concentration on both social science and environmental health.

In addition to healthy settings in the village setting, the SCHI programme is also targeting the need for healthy environments within the schools and markets in the area. A recent RE:ACTIVE programme with Mfera CDSS named “My Life, My Choice” aimed to encourage young people to aspire to a university education and future careers through drama, sport and reciprocal visits between students from the school and the Malawi Polytechnic. This was supported by University of Strathclyde and we hope to extend this to youth in the village as well as other schools.

All work is being implemented hand in hand with the Chikwawa District Health Office to increase opportunities for scale up through the development of village action plans in conjunction with community empowerment to identify their resources and needs.

This project is overseen by a steering group in Malawi composed of Ministry of Health staff from central, Zonal and District level, academics from University of Malawi and partners from organisations also working in Chikwawa District to ensure information sharing and support.

SCHI also works with other organisations and charities to gain support for activities. This has provided financial support and tangible goods for the District Hospital. These have included to date:

- Office extensions and HIV unit at Chikwawa District Hospital.
- Construction and provision of equipment for a high dependency unit at Chikwawa District Hospital
- Renovation and improvement of guardian shelter at Chikwawa District Hospital.
- Provision of equipment for Chikwawa District Hospital, Kachere Rehabilitation Centre and Queen Elizabeth Central Hospital including medical equipment, new mother kits, drugs and hospital beds.

In 2014 we are also looking forward to receiving up to 100 hospital beds and 2 x-ray machines for Chikwawa District Hospital.

For further information on the Scotland Chikwawa Health Initiative please contact Dr Tracy Morse (tracythomson@africa-online.net)

Visit: http://www.strath.ac.uk/malawi/projects/chikwawaproject/

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Peer reviewed publications


Community knowledge variation, bed-net coverage, the role of a district health care system and their implications for malaria control in southern Malawi. SJ Masangwi, AM Grimason, TD Morse, NS Ferguson, LN Kazembe. South African Journal of Epidemiology and Infection. (2012) 27(2):00:00.


Policy Briefs

Towards effective diarrhoeal disease control and treatment in Malawi (2010/11) PATH.

Gap Analysis for Environmental Health in Malawi conducted on behalf of the National Commission for Science and Technology, (Government of Malawi) to inform the National Health Research Agenda (2011)

Situation Analysis of Food Safety in Malawi (2014) Ministry of Health and WHO (Malawi).

Published in Professional Journals


Presentation and Facilitation at Conferences

Invited plenary speaker at the Pan African Chemistry Network (Royal Society of Chemistry), PACN Congress on Sustainability, December 2013, Africa Hall, Addis Ababa.


Interface between environmental health and higher education. Workshop facilitator at the HERS-SA Academy, Cape Town. (2010). HERS-SA is an annual conference for female academics which was attended by 83 women from 30 Universities across Africa, Europe and the USA. www.hers-sa.org.za


Gender Parity in Environmental Health Higher Education. 2nd All Africa Environmental Health Congress. Lilongwe, Malawi. May 2010.

