The Limpopo Arusha School Health (LASH) project

A comprehensive school- and health system-based approach to adolescent health promotion in South Africa and Tanzania

Main partners:





Muhimbili University of Health and Allied Sciences

Kagoma S. Mnyika kmnyika@gmail.com



Other partner(s):

University of Limpopo, South Africa, Dr. Hans Onya (ho7@mweb.co.za), Centre for Educational Development in Health Arusha (CEDHA), Tanzania, Director Melkiory Masatu (mmassatu@gmail.com), University of Bergen, Norway, Prof. Anne Nordrehaug Åstrøm (anne.aastrom@iko.uib.no)

Project Objectives:

The overall goal of this project was to improve the evidence base for effective health promotion among school-aged adolescents in sub-Saharan African settings, and to strengthen the research capacity and higher education within the field of health promotion. Specifically, the objective was to design, implement and carefully evaluate a comprehensive intervention program to promote the health of in-school adolescents in Arusha Region and Limpopo Province. Based on the WHO Global School Health Initiative, the project worked with local teachers and health personnel, as well as with students and parents, in designing and implementing an intervention targeting key behavioral health determinants. The specific focuses of the intervention was determined based on a thorough needs assessment within participating communities, but consisted of interventions and policies targeting one or more of the WHO identified behavioral categories: tobacco use; alcohol and substance use; behavior that results in injury and violence; dietary and hygienic practices; physical inactivity; and sexual risk behavior.

Results: Master students by funding

Awarding Institution	NUFU		Quota funding		Other funding		Total	
	Female	Male	Female	Male	Female	Male	Female	Male
University of Limpopo					1			
University of Oslo			1					

Ph.D. candidates by funding

Awarding Institution	NUFU		Quota funding		Other funding		Total	
	Female	Male	Female	Male	Female	Male	Female	Male
University of Limpopo	1						1	
University of Bergen			1				1	

At each site schools were randomly allocated into either intervention schools or control schools, with 10 schools in each arms and a total number of 40 schools at both sites. Data from students, teachers and at school level were collected at baseline and one follow-up. At the Arusha site, clinical oral data were gathered both baseline and follow-up as well. The baseline set consists of data from 4400 students, 300 teachers and 40 schools. At follow-up two years later, the participation from the students dropped with app. 27 %. At each site a protocol was made for how the schools in collaboration with the project partners should go through certain steps of becoming health promoting schools. Each school received a summary of findings from the baseline on their students' behavior which was used for planning of the intervention activities at the schools. The control schools will receive a delayed intervention by the end of 2011. The data from the follow-up has just recently been cleaned. So far there seems to be positive effects on the oral health among the students who received the oral health intervention in Arusha. Some of the further analysis will focus on outcome effect both on students' behaviors. The idea with Health Promoting Schools is itself based on sustainability in the sense that it encourages schools to closely monitor students' behaviors and the physical environment with the purpose of eventually intervene with their available means and resources. The LASH project itself, however, is not able to assess the long term effects at the schools. In terms of capacity building, the project collaboration has been important for all institutions involved.

Publications: E Mmbaga, A Helleve, G Leyna, M Masatu, H Onya, K I Klepp (2011). P1-S5.35 Multiple concurrent sexual partnerships among adolescents in Tanzania and South Africa: a comparison between areas with contrasting level of HIV magnitude. Sex Transm Infect 2011;87:A190-A191 doi:10.1136/sextrans-2011-050108.213 Epidemiology poster session 5: Transmission dynamic: partners: concurrency. Mbawalla HS, Masalu JR, Astrøm AN. (2010). Socio-demographic and behavioral correlates of oral hygiene status and oral health related quality of life, the Limpopo - Arusha school health project (LASH): A cross-sectional study. BMC Pediatr. 2010 Nov 30;10:87. Åstrøm AN, Mbawalla H. (2011) Factor structure of health and oral health-related behaviors among adolescents in Arusha, northern Tanzania. Acta Odontol Scand. 2011 Sep;69(5):299-309. Epub 2011 Mar 30. Mbawalla HS, Mtaya M, Masalu JR, Brudvik P, Astrom AN. (2011). Discriminative ability of the generic and condition —specific Child Oral Impacts on Daily Performances (Child-OIDP) by the Limpopo-Arusha School Health (LASH) project: a cross-sectional study. BMC Pediatr. 2011 May 26;11:45
Helleve A, Flisher AJ, Onya H, Mathews C, Aarø LE, Klepp K-I (2011). The association between student's perceptions of a caring teacher and sexual initiation. A study among South African high school students. Health Educ. Res. doi: 10.1093/her/cyr031 First published online: May 16, 2011





Health education lessons at one of the LASH intervention schools, Arusha.

Programme: NUFU

ProjectID: NUFUPRO-2007/10051

Discipline area(s): Health promotion, community

medicine, adolescent health

Period: 2007-2011(2012) Allocation: NOK 4.532.000