Population: 135131

**Brief Introduction to HDSS VADU**

KEM Hospital, Pune initiated the Vadu Rural Health Program (VRHP) in 1977. VRHP has been providing primary health care to the 90,000 populations in 22 villages (presently about 60000 populations in 14 villages) in Pune district, using a three-tier health care model with Vadu Rural Hospital functioning as the first referral unit and KEM Hospital in Pune city as the tertiary referral centre. It demonstrates a unique Public Private Partnership between the public sector and the NGO sector that has pioneered several innovative strategies in health care delivery, most recently the Health and Demographic Surveillance System. VRHP initiated the **HDSS Vadu site** in August 2002 with initial support for formation of the HDSS from the Gates Institute for Reproductive Health, Johns Hopkins Bloomberg School of Public Health, USA for technical collaboration and financial support to establish an experimental field station to systematically test health care interventions.
Objectives:

- To develop a longitudinal database system
- To improve the service delivery of Vadu Hospital in Primary Health care with an emphasis on Reproductive Health through designing suitable intervention research programs.
- To monitor trends in health status of the populations through specified health indicators
- To create a quasi experimental field station
- To provide support to the field /hospital based clinical and epidemiological research

Priority Research Areas:

- Reproductive health research
- Maternal & child health research
- Vaccine trials and other Clinical trials
- HIV surveillance
- Adult health
- Environment & health
- Infectious diseases
- Non-health interventions
- Risk factor profile of non communicable diseases
- Migration and health care services
- Telemedicine
- Geographic Information System and health
- Metagenomics (Microbiome of human body)
- Ayurgenomics (amalgamation of the ancient science of Ayurveda and modern genomic science )

Ongoing Key Projects

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Funding agency</th>
<th>Grant Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pune Microbiome study</td>
<td>DBT</td>
<td>August 2013- Ongoing</td>
</tr>
<tr>
<td>Cook Stove study</td>
<td>John Hopkins Bloomberg school of public health</td>
<td>October 2012 - Ongoing</td>
</tr>
<tr>
<td>Women, WASH and Health in Rural Pune District. Identifying stress and unmet needs*</td>
<td>London school for hygiene and tropical</td>
<td>June 2013- Ongoing</td>
</tr>
<tr>
<td>Project Description</td>
<td>Institution</td>
<td>Duration</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>Preparedness for Marriage</td>
<td>ICMR</td>
<td>November 2012-Ongoing</td>
</tr>
<tr>
<td>TRISUTRA-Ayurgenomics</td>
<td>CSIR</td>
<td>2009- Ongoing</td>
</tr>
<tr>
<td>INTREC</td>
<td>European Commission</td>
<td>February 2012 – September 2012</td>
</tr>
<tr>
<td>NVGH Typhoid Vaccine trial</td>
<td>NVGH</td>
<td>November 2011- July 2012</td>
</tr>
<tr>
<td>INDEPTH iSHARE</td>
<td>INDEPTH network</td>
<td>March 2012</td>
</tr>
<tr>
<td>Rota Vaccine Project</td>
<td>DBT, Govt of India. PATH, France.</td>
<td>August 2010- Ongoing</td>
</tr>
<tr>
<td>CVRU</td>
<td>DBT, Govt of India.</td>
<td>July 2010- Ongoing</td>
</tr>
<tr>
<td>INDEPTH PopStats (INDEPTH Minimum Dataset Management and Graphical Presentation)</td>
<td>INDEPTH Network</td>
<td>March 2010- Ongoing</td>
</tr>
<tr>
<td>Meningitis Vaccine Project (MVP 005)</td>
<td>PATH, WHO and SIIL</td>
<td>Jan 2010 – Ongoing</td>
</tr>
<tr>
<td>HIV-Cervical Cancer Prevention Research Program</td>
<td>NIH through the ICMR and Vanderbilt University USA</td>
<td>Aug 2008- Ongoing</td>
</tr>
<tr>
<td>Influenza Surveillance- Influenza disease burden in rural communities in India</td>
<td>CDC, Atlanta, USA.</td>
<td>May 2009- Ongoing</td>
</tr>
<tr>
<td>Ayurgenomics- Integration of Ayurveda with Genomics for system biology approach in predictive and personalised medicine</td>
<td>CSIR, Govt of India</td>
<td>April 2009- Ongoing</td>
</tr>
<tr>
<td>Measles Vaccine trial</td>
<td>WHO</td>
<td>April 2009- Ongoing</td>
</tr>
<tr>
<td>Identification of causes of death using verbal autopsies in the HDSS Vadu area</td>
<td>HDSS Vadu</td>
<td>Sep 2004 Ongoing</td>
</tr>
<tr>
<td>Health and demographic surveillance system (HDSS, Vadu)</td>
<td>HDSS Vadu</td>
<td>Jan 2002 ongoing</td>
</tr>
</tbody>
</table>
Planned Projects

<table>
<thead>
<tr>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibiotic Resistance Surveillance</td>
</tr>
<tr>
<td>SAGE Phase II</td>
</tr>
<tr>
<td>Dengue surveillance study</td>
</tr>
</tbody>
</table>

National Collaborations

- Bharat Biotech International Ltd.
- Chest Research Foundation, Pune
- Council for Scientific and Industrial Research, New Delhi
- Department of Biotechnology, New Delhi
- Geo-informatics Department of Geography, Pune University
- Institute of Genomics & Interactive Biology, New Delhi
- Indian Council of Medical Research, New Delhi
- International Institute of Information Technology, Pune
- National AIDS Research Institute, Pune
- National Centre for Cell Sciences, Pune
- National Chemical Laboratory, Pune
- National Institute of Virology, Pune
- Public Health Foundation of India, New Delhi.
- Serum Institute of India Ltd., Pune
- St. John's Medical College, Bangalore
- Tata Institute of Social Sciences, Mumbai
- University of Pune, Department of School of Health Sciences
- Ministry of Health and Family Welfare, Government of Maharashtra
- Health and Demographic Surveillance System, Ballabgarh, AIIMS, India
- Christian Medical College (CMC), Vellore.
International Collaborations

- Centre for Disease Control & Prevention (CDC), Atlanta, USA
- Department of Public Health and Clinical Medicine, Umeå University, Sweden
- Hellar Kellar International, New York
- Hospital for Sick Children, Toronto, Canada
- Imperial College, London
- Johns Hopkins University and Bloomberg School of Public Health, Baltimore, USA
- INDEPTH: International Network of Field Sites with Continuous Demographic Evaluation of Populations and Their Health in Developing Countries, Accra, Ghana
- London School of hygiene & Public Health, UK
- Program for Appropriate Technology in Health (PATH), Seattle, USA
- Swiss Tropical and Public Health Institute, Basel
- Vanderbilt University, Nashville, Tennessee, USA
- World Health Organization (WHO), Geneva, Switzerland

Funding Agencies

- Council for Scientific and Industrial Research, Government of India, New Delhi
- INDEPTH Network, Accra, Ghana.
- World Health Organization, Geneva, Switzerland
- Serum Institute of India Limited, Pune, India
- PATH, France
- Helen Keller International, New York
- Department of Biotechnology, New Delhi
- Akzo Nobel, Singapore
- Imperial College, London
- The World Bank, USA; USAID, USA; WHO, Geneva and IMPACT Foundation, UK
- The Bill and Melinda Gates Institute for Population and Reproductive Health, Johns Hopkins Bloomberg School of Public Health, Baltimore USA
- Heinz, India


[2010] Health inequalities among older men and women in Africa and Asia: evidence from eight Health and Demographic Surveillance System sites in the INDEPTH WHO-SAGE study; Nawi Ng, Paul Kowal, Kathleen Kahn, Nirmala Naidoo, Salim Abdullah, Ayaga Bawah, Mohammad Hakimi, Siddhivinayak Hirve, Abraham Hodgson, Sanjay Juvekar, Catherine Kyobutung et al 10.3402/gha. v3i0.5302;96-107.

[2010] Social gradients in self-reported health and well-being among adults aged 50 and over in Pune District, India; Siddhivinayak Hirve, Sanjay Juvekar, Pallavi Lele and Dhiraj Agarwal; 10.3402/gha. v3i0.5302; 88-95.


[2009] Using the INDEPTH HDSS to build capacity for chronic non-communicable disease risk factor surveillance in low and middle-income countries; Nawi Ng, Hoang Van Minh, Sanjay Juvekar et al. Global Health Action Supplement 1, 2009.


(ref: http://www.cdc.gov/pcd/issues/2008/jul/07_0115.htm)


