Rural Unit for Health and Social Affairs (RUHSA)
A Rural Community Health Care Programme

Christian Medical College
Vellore

PART I

AWARD APPLIED BY:

PRIVATE SECTOR ORGANIZATION

PART II

INTRODUCTORY INFORMATION

PROJECT NAME: Rural Unit for Health and Social Affairs (RUHSA) - A Rural Community Health Care Programme

INSTITUTE: Christian Medical College, Vellore

AWARD CATEGORY APPLIED FOR: SKOCH SMART GOVERNANCE AWARD – Health

ADDRESS:

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Ida Scudder Road,

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Email: directorate@cmcvellore.ac.in

PROJECT COMMENCEMENT DATE: 1977

PROJECT COMPLETION DATE: Ongoing

DETAILS OF RESPONDENT:

Dr. Sunil Chandy,

Director,

Christian Medical College,

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Overview of the project

India is a land riddled with disturbing statistics. About 45% of its population lives on less than $1 per day and over 40% of children are under-weight - the highest in the world. Each year, over 1 million women and children die from poverty related diseases and lack of health care. Such pervasive inequality, poverty, disease, and preventable mortality are shocking for a country of 182,000 millionaires, which is feverishly jockeying for position among the world's superpowers.

But poverty, suffering and pain go beyond statistics. And while we may be tempted to deal with the symptoms of poverty related diseases through quick-fix, band-aid solutions, none of these bring lasting change. The answer lies in tackling, head on, the systems and policies that perpetuate inequality; building affordable health care systems, improving public access to these systems, and equipping the health care work force to tackle the unique problems faced by the disadvantaged and marginalized in our society.

Rural Unit for Health and Social Affairs (RUHSA) was created in 1977 by Christian Medical College, Vellore for a rural community in K.V Kuppam block, Vellore district, Tamil Nadu, to develop a model rural health care center promoting health through provision of affordable medical care, innovations in rural development and through it contribute to alleviation of poverty. Thus, Christian Medical College and Hospital, is unique among unaided, private sector health care institutions, in not limiting itself to high-tech tertiary

care, but actively pursuing secondary and primary health care models for delivery of health care to rural India.

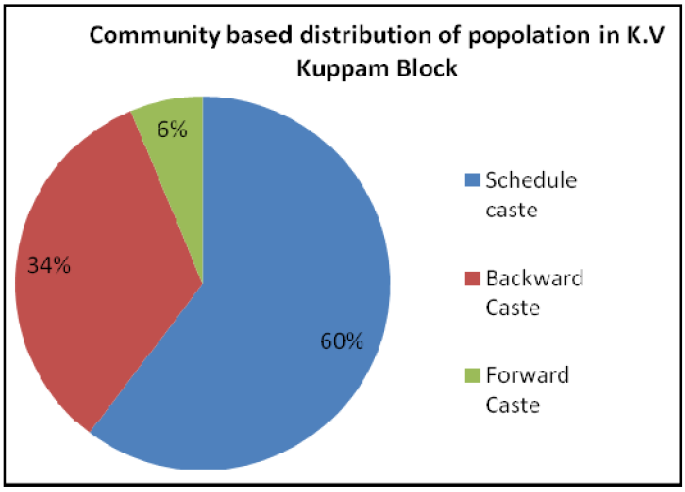
Challenges faced before deployment of the project

A. Very Poor Health Indicators in 1977- K.V.Kuppam block

Infant mortality Rate	116/1000
Child Mortality Rate under 5 yrs	233/1000
Crude Birth Rate	38/1000
Crude Death Rate	19/1000
% Deliveries by untrained birth attendants	87%
% of households using primary health center or sub center	9%

B. Socially excluded, poor and vulnerable community

94% of the population is from the economically weak Schedule Caste and Backward Caste background.



C. Lack of access to Health Services.

Only 9% of total households used primary health center or sub center services.

The objectives of the project

The objective of RUHSA programme is the development of the rural community of K.V. Kuppam Block through an integrated, multidisciplinary, rural health, and socioeconomic development programme.

Description of the implemented project

RUHSA reaches out to the people of K.V. Kuppam rural development block, one of 21 blocks in Vellore district, Tamil Nadu, and to a lesser extent the neighboring blocks, through its 70 bed community health center and 23 outreach health centers. Outpatient services include general clinic and special clinics for antenatal, well baby, diabetes, TB, HIV, ENT, ophthalmology, psychiatry, dental, and orthopedics care. Every year, about 100,000 outpatients and 4000 in-patients are treated in the RUHSA base hospital, and about 35000 patients are seen at the peripheral outreach clinics.

The RUHSA Model consists of two central concepts. The first concept is integration of health and development through the involvement of a team of professionals drawn from the fields of

- **T**raining,
- **E**ducation,
- **A**griculture and
- **M**edicine.

The second concept is to work closely with the government by choice, despite being an NGO and to remain flexible in adapting interventions in response to community participation.

The unique features of the RUHSA health care model are:

1. **Improved access to health care through outreach clinics and effective use of a team of healthcare personnel with different levels of expertise**

   The peripheral health care team consists of a doctor, public health nurse, rural community officer (who holds a Master's degree in social sciences), health-aide, and a community health worker. Once a week, half-day mobile clinics are conducted at these sub-centers. The mobile clinics are primarily managed by public health nurses. The primary objectives of the mobile clinics are to provide antenatal care services at the door-step of the community; to link them with appropriate referral services; to follow up with those individuals who have chronic conditions (rheumatic heart disease, seizure disorder, bronchial asthma, diabetes, hypertension); and to identify individuals with undiagnosed diseases in need of medical care. The highlight of the RUHSA outreach clinics is that rural women are educated and motivated to access trained, public health nurse managed, **breast and cervical cancer screening services** provided at the clinic on a regular basis.

2. **Nutritionist initiated rural Community Nutrition Center to address highly prevalent malnutrition in adults and children in the rural areas**

   RUHSA Community Nutrition Center focuses on reducing malnutrition in children below 5 years and promoting healthy food practices to decrease life style diseases in adults using the following strategies: Promotion of Exclusive Breastfeeding for six months; Information, Education and Communication on Nutrition; Nutrition counseling of parents. It is a family friendly center where mothers, grandmothers, fathers and children

come and learn about healthy food practices, observe cooking demonstrations, and receive handouts promoting breastfeeding and a recipe booklet on quick, affordable and nutritious food.

3. **Community based rehabilitation programme for mentally and physically challenged individuals**

   RUHSA's team of physiotherapists and occupational therapists makes home visits, provides training for care takers, makes individual disability assessments, and also encourages them to involve in income generating activities like paper bag making. RUHSA also facilitates the differently abled to avail various benefits provided through Government initiated programmes, Regional Rehabilitation Center in Vellore, and other independent non-governmental organizations, including provision of aids & appliances, economic assistance, interest free loans to start small scale enterprises, and scholarship for education.

4. **Community Driven Socioeconomic Empowerment of the Rural Community, improving access to structures of governance, empowerment of women, raising community resources in K.V. Kuppam Block**

   RUHSA has partnered with the State Government in the formation of Self-help women groups in the block since 1997 and has trained more than 400 groups to initiate income generating enterprises, make good investment decisions and give leadership to social and health related projects.

5. **Economic upliftment of marginal farmers through Farmers Clubs**

   RUHSA has been working with marginal farmers who are in debt and facing financial hardships due to failure of rains and poor yield from available limited land area. Six

Farmer's Clubs have been constituted and registered with the society by the initiative of RUHSA. These clubs facilitate link up with NABARD for training support, provide interest free loans to purchase milch-animals with assistance from independent collaborators of RUHSA, organize training in organic farming and vermi-compost making, and thus encourage poor farmers to mobilize resources to help themselves.

6. **Youth clubs to engage rural youth**

The 6 youth clubs have been engaging dropouts and unemployed rural young boys meaningfully through health education and recreational activities. Career guidance and leadership development sessions are organized regularly for them. The thrust of the programme is to divert the energy of the youth towards constructive activities that help them focus on their career and development of community.

7. **Care of the neglected poor elders in the block**

RUHSA has initiated 5 Day Care Elderly Centers to provide recreation facility and noon meals to 120 elders. These centers are managed by the community through their selected Self-help women groups with a monthly allocation of a fixed amount from RUHSA. In addition to offering food to the aged poor, these centres also provide health services, recreation, counseling and a place where the elderly can ventilate their feelings with their peers. In one of the centers, the Day Care

elderly centre is combined with a play school for 25 poor rural children. The kids and elders have great quality time together. The beauty of the special bonding that has developed between the elders and the children is beyond words. For an elder who has been abandoned, there can be nothing more joyful than the love and affection of these little children.

8. Community College

RUHSA has been actively involved since 1982 in training rural youth in Vocational training courses. The programme targets poor school dropouts and unemployed youth seeking self employment opportunities. RUHSA Community College helps in facilitating employment opportunities for underprivileged rural youth and contributes to workforce development in partnership with industries and related organizations through training, retraining and skills improvement. It is paving the way for young people to find a better future and thus contribute to rural development and better health.

9. Training of different levels of health care personnel

RUHSA trains various levels of health care professionals and is actively engaged in supporting the system of Rural Health Care in India. Various short training programmes modeled on the concept of integrated health and development are conducted, along with a one year diploma in health management and health administration. The objective is to equip the middle level health care professional with a good understanding of health care

systems, and to teach skills of management in the delivery of public health services. Annually about 3000 health care personnel from different disciplines are trained.

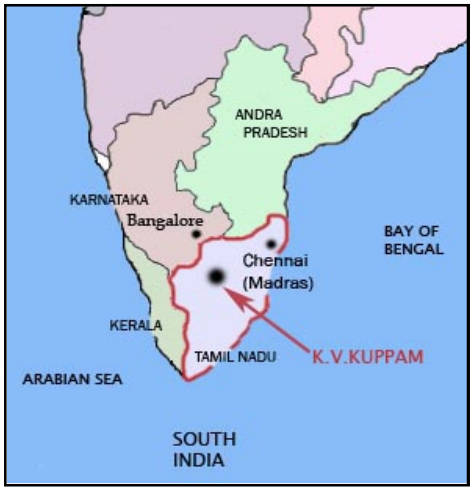
10. CMC's Model Rural Health care Programme and Governance

RUHSA health care programme is designed to foster sustainable rural growth through providing affordable primary health care services using the expertise of different levels of health care personnel, and by developing rural communities using the energies and resources of poor community members (self-help women groups, marginal farmers, differently abled, poor elderly, rural youth) for their own benefit. RUHSA has made links and developed partnerships with both government and non-governmental organizations to mobilize financial resources and technical training expertise for rural development. RUHSA assesses the community's own institutions and works in partnership with them to address the health related problems in the community.

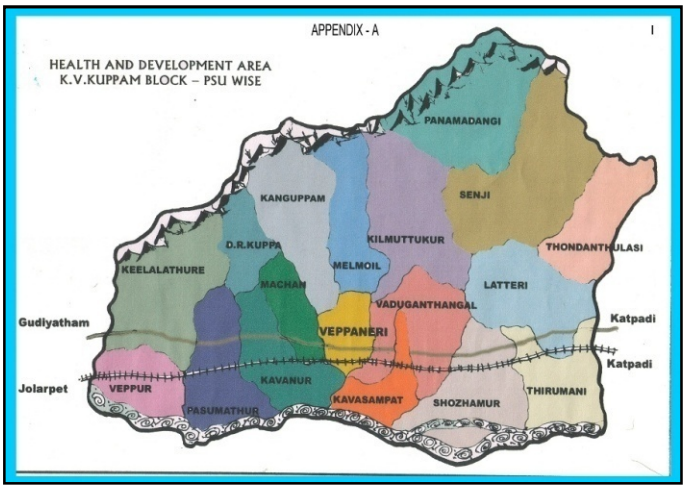
From the time it was founded in 1900 by Dr. Ida Scudder, Christian Medical College has been strongly committed to the care of the poor and needy, and continues to find mechanisms that strengthen the capacity of its outreach departments to respond to the needs and priorities of rural communities.

Details of the coverage of the targeted population

The K.V Kuppam Block is one of the 21 government administrative blocks that make up the Vellore administrative district in Tamil Nadu. There are 39 panchayats and 89 revenue villages within the block.



Location of K.V. Kuppam



Map of K.V. Kuppam Block

The total population of K.V Kuppam block is **128,033**. It is a 100% rural area. Majority of the block residents follow Hindu religion and about 3% belong to other religions, including Muslims and Christians. Most of the inhabitants in the block subsist on agriculture and linked occupations. There is a recent trend among young men in the rural areas to migrate to the nearby urban towns and cities to work as labourers or get into alternate professions. Some of the other occupations are weaving, poultry farming, dairy farming and "Beedi"(country cigarettes) making. The overall literacy rate is 64%. Male literacy rate is 73.4% and Female literacy rate is 57.4%.

Comparison of the pre-deployment scenario and the post deployment scenario - how the solution helped

As the following statistics show, RUHSA's model of health care has resulted in a dramatic improvement in health indices among a poor, socially excluded, rural population. The reduction

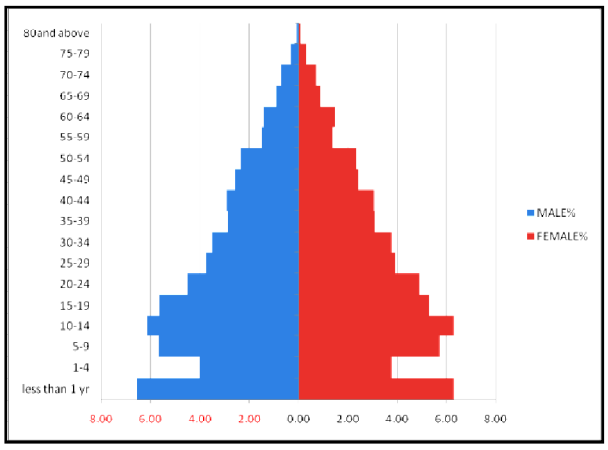
in infant and maternal mortality has led to a population dividend – an increase in average life expectancy and a higher proportion of individuals belonging to the socioeconomically productive age group.

Comparison of health indicators

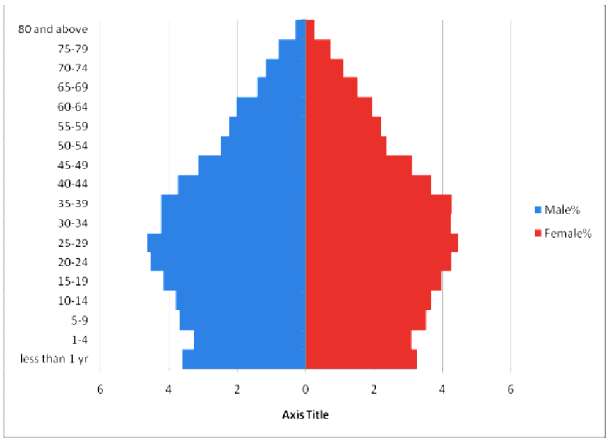
Health Indicators	**1977**	**2013**
Infant mortality Rate	116/1000	16.1/1000
Crude Birth Rate	38/1000	13.3/1000
Crude Death Rate	19/1000	7 /1000
% of Institutional Deliveries	13%	100 %
Maternal Mortality ratio	-	0.11/1000 live births

Population Pyramid of K.V. Kuppam Block

Year 1986



Year 2010



Key learning from the project

The year 1977 marked a bold departure from the traditional clinical model of community health to an integrated health and development model. RUHSA is an integrated, multidisciplinary, rural health and socioeconomic development programme for a defined area and population, developed in partnership with the local community and government and appropriate to the resources available. The concept of total human development in relation to community has been central to the RUHSA programme.

RUHSA's principles of health care delivery are acceptable, feasible, and replicable. These include: -

- Low cost medical care
- Comprehensive nature of health service
- Health care linked with socio economic development
- People's participation in their own development, and
- Attention to staff patterns, utilization, supervision, training and the administrative set up.

RUHSA is a TEAM approach to rural development **with the community for the community**. It believes that social communities of motivated people, who live, work and relax together and with the community can best serve the needs of rural people.

Note on cost effectiveness of the project

The figures shown above highlight the effect that RUHSA has had in improving health indicators such as infant and maternal mortality for the rural population of K.V Kuppam. This has translated into an improvement in socioeconomic indicators as well, because a higher proportion of the population live to see their economically productive years. The RUHSA approach is cost effective because it uses locally available resources and low cost, appropriate technology in its

health care model. The services it offers to the community are heavily subsidized by CMC's tertiary care main hospital on the town campus. Administratively, it is the perfect example of minimum government and maximum governance - the 70 bedded base hospital and 23 peripheral centres deliver care right at the community's doorstep, and the model makes good use of community volunteers who facilitate the community in recognizing their needs and finding solutions to their problems. This approach therefore scores on several fronts – it requires must less infrastructural capital to set up, has low maintenance costs, yet delivers high gains to both the community and the nation in terms of quality of life indices.

Future road map of the project

In the 36 years since RUHSA was set up, the needs of the community have outgrown RUHSA's clinical and administrative space. The outpatient department was initially designed to accommodate up to 200 people per day, but by 2013 that number had doubled. To cope with this demand, in 2014 RUHSA will begin an essential capital expansion to enlarge its Outpatient Department, add its first Emergency Department, and create new space for programs to meet the needs of residents of the K.V. Kuppam block.

SHORT CV OF THE PROGRAM HEAD

NAME	POSITION TITLE
Rita Caroline Isaac	Professor, Christian Medical College Head, RUHSA Department, CMCH

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Christian Medical College, Vellore, India	MBBS	1982	Medicine
Christian Medical College, Vellore, India	MD	1999	Community Medicine
Tufts University, Boston	MPH	2005	Epidemiology, Biostatistics

A. Positions and Honors:

Positions and Employment

2009 Oct till Date	Director, RUHSA Department, Christian Medical College
2008 till date	Professor of Community Medicine, RUHSA Department
2006 till date	Adjunct Associate Professor, Public Health & Family Medicine, Tufts University, Boston.
2006-2008	Associate Professor of Community Medicine, RUHSA Department
2004-2005	Research Associate, Infection and Nutrition Division, Department of Public Health and Family Medicine, Tufts University, Boston, USA
2004-2006	Reader of Community Medicine, Christian Medical College, Vellore
2002-2004	Senior Lecturer of Community Medicine, Christian Medical College, Vellore, India
1999-2002	Lecturer of Community Medicine, Christian Medical College, Vellore, India
1996-1999	Resident in Community Health Department, Christian Medical College, Vellore, India
1995 -1996	Junior Clinical Assistant, RUHSA Department, Christian Medical College, Vellore, India
1983-1994	Medical Officer, Private Hospital, Tirupur, India

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Honors

- Recipient of Dr. Rangarajan Memorial Prize for the Best M.D student during the year 1998 to1999.
- Recipient of fellowship from Dr. Sherwood L Gorbach's Fogarty grant for MPH at Tufts University, Boston, MA Sept 2003 through Aug 2005

- Recipient of 'Outstanding Trainee Achievement' award for being a model trainee by the NIH Fogarty International Center during the 20th Anniversary Celebration of the Brown-Tufts AIDS International Training & Research Programme (AITRP) during the year 2013.

B. Selected Publications:

1. **Aaron R**., Muliyil, J., Abraham, S. Medico-Social Dimensions of Menopause: A cross-sectional study
   from rural South India. National Medical Journal of India 2004; 15(1).
2. **Aaron R.,** Joseph, A., Abraham, S., et al. Suicides in young people in rural Southern India. Lancet 2004; 363:1117-1118.
3. **Isaac R**., Varghese, G., Mathai, E., Manjula, J., Joseph, I. Scrub Typhus: Prevalence and diagnostic issues in rural Southern India. Clinical Infectious Diseases 2004; 39:1395-1396.
4. Varghese G, Abraham OC, Mathai D, Thomas K, **Aaron R**, Kavitha ML, Mathai E. Scrub typhus among hospitalised patients with febrile illness in South India: magnitude and clinical predictors. Journal of infection 2006;52:56-60
5. **Isaac R,** Helan, J., Minz, S., Bose, A. Community perception of child drowning in South India: A qualitative study. Ann Trop Paediatr 2007 Sep; 27(3):225-229.
6. **Isaac R,** Jacobson D., Wanke, C., Hendricks, K., Knox, T, Wilson I. Declines in dietary macronutrient intake in persons with HIV infection who develop depression. Public Health Nutr 2008 Feb;11(2):124-131.
7. **Isaac R,** Reginald AG, Knox TA. Malabsorption in Wasting HIV Disease: Diagnostic and management issues in resource poor settings. Tropical Doctor 2008 July;38:133-34.
8. Chomat AM, Wilson I, Wanke C, Selvakumar A, John KR, **Isaac R**. Knowledge, beliefs and health care practices relating to treatment of HIV in Vellore, Tamilnadu, India. Complementary therapies versus allopathic Medicines. AIDS Patient Care and STDs 2009;23(6):477-484.
9. Kacanek D, Jacobson DL, Spiegelman DL, Wanke C, **Isaac R**, Wilson IB. Incident Depression is Associated with Poorer ART Adherence: A longitudinal analysis from the Nutrition for Healthy Living (NFHL) study. J AIDS 2010;53:266-272
10. Sophia A, **Isaac R**, Rebekah G, Brahmadathan K, Rupa V. Risk factors for otitis media among preschool, rural Indian children. Int J Pediatr Otorhinolaryngol. 2010 Jun;74(6):677-83. Epub 2010 Apr 2
11. Srikanth S, **Isaac R**, Rebekah G, Rupa V. Knowledge, attitudes and practices with respect to risk factors for otitis media in a rural South Indian community. Int J Pediatr Otorhinolaryngol 2009 Jul 27. [Epub ahead of print
12. Isaac R, Finkel M, Olver !, Annie I.K, Prashanth H.R, Subhashini J, Viswanathan P.N, Trevena L. Translating evidence into practice in low resource settings: Cervical Cancer Screening Tests are only part of the solution in rural India. Asian Pac J Cancer Prev. 2012;13(8):4169-72

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