# **Patient Empowerment – The eWay**

## A Story from Rural Tamil Nadu



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# TeleHealth Education for Rural Tamilnadu An ATNF - MSSRF Initiative - Aims & Objectives

- Knowledge Empowerment > important than antibiotics in Health
   Care Sir Muir Gray CKO NHS
- Will dissemination of authenticated validated Health Information to rural India with 2 way Audio Video using multi point VC radically transform Health Care Outcomes
- Can one promote "Stay Healthy" & "eWellness" using ICT
- Can one quantify the results of such intervention ?
- Is Knowledge Empowerment = Patient Empowerment = Better Compliance



Village Resource Center of MSSRF

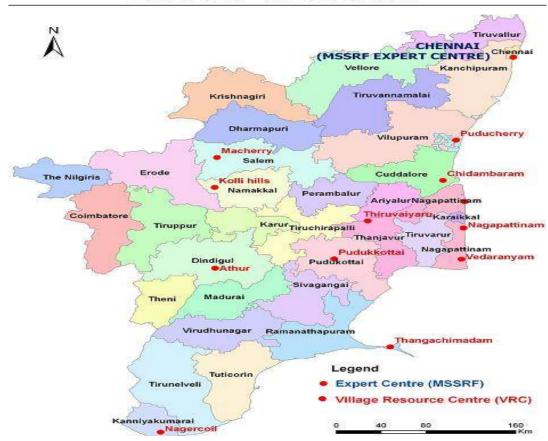


# Initial Visit to a Village to understand level of interest, requirements & convenience



# TELE HEALTH EDUCATION FOR RURAL TAMILNADU (An ATNF-MSSRF Initiative)

TAMIL NADU - VRC's LOCATION





Apollo Hospitals & Prof M. S. Swaminathan Founder Chairman M S Swaminathan Research Foundation







#### ATNF - MSSRF TELEHEALTH EDUCATIONAL PROGRAM



#### RESPONSIBILITY MATRIX

#	Activity	Responsibility	Assigned to
1.	Identifying the topic for TeleHealth Educational Session	ATNF	Dr. Ganapathy
2.	Finding appropriate consultant to deliver the presentation	ATNF	Dr. Ganapathy
3.	Following up and obtaining the presentation in English from the consultant through email	ATNF	Srinivas
4.	Preparing Agenda with a brief write-up on the topic	ATNF	Srinivas
5.	Disseminating the Agenda to all concerned through email	ATNF	Srinivas
6.	Getting the Questionnaire in English from the consultant	ATNF	Srinivas
7.	Translating Questionnaire into Tamil and distributing to all concerned through email	MSSRF	Srinivas
8.	Studying the English presentation, translating the contents into Tamil (with simplification of highly technical and strong medical phrases) and re-creation of the presentation with embedded clipart	MSSRF	Srinivas
9.	Printing multiple copies of the questionnaire, dispatching to concerned VRC/VKC, distributing to the general public and mobilizing the audience at the venue		The staff of MSSRF
10.	Communicating with ATHS Hyderabad IT team, testing the Internet connectivity and handling rehearsal	ATNF	Srinivas
11.	Delivering the presentation and answering the questions of the general public assembled at VRC/VKC	ATNF	The Consultant
12.	Accompanying the consultant during TeleHealth Session and assisting on technical / linguistic issues	ATNF	Srinivas
13.	Recording the session on flip camera (as a backup to the master recording done by ATHS Hyderabad)	ATNF	Srinivas
14.	Ensuring that the Questionnaire and Feedback Forms are filled by the audience, collecting back the filled documents and dispatching to ATNF office		The staff of MSSRF
15.	Logging the obtained data into the system, performing cross-functional analysis and generating executive digest as deemed necessary by the management	MSSRF	Srinivas
16.	Assimilating the collective data and preparing detailed MIS reports with embedded graphics and charts	ATNF and MSSRF	Srinivas

### Organisation of Rural Telehealth Programmes - Modus Operandi



Confirmation of Date, Topic & Speaker by ATNF

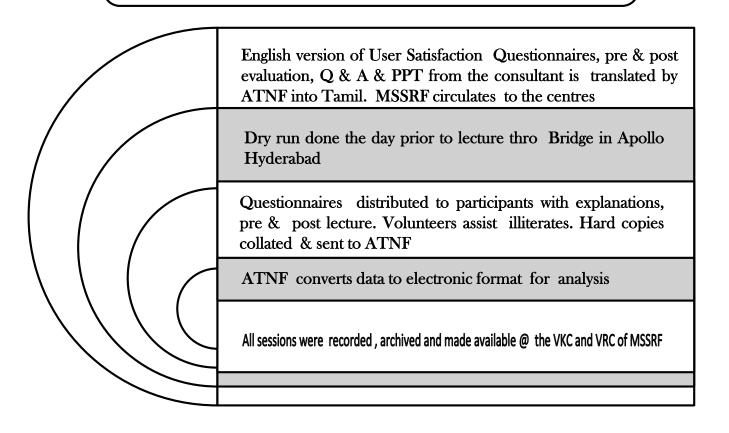


MSSRF finalizes Village centres for that particular programme



MSSRF Village Knowledge Centres staff, disseminate info to villagers thro' Voice/ text SMS, publicise in Notice Board, announcements thro PA system, local dailies, distribution of leaflets, sending post cards to previous participants, personal invites & attention to Local logistics including serving refreshment to participants

# Organisation of Rural Telehealth Programmes Modus Operandi Contd..





#### Recognizing the Dangerous Headache Q&A

Which one of the following is a dangerous headache?

Slight early morning headache with constipation

Tolerable pain on the forehead without any vomiting / nausea

→ Elderly person getting headache for the first time

Children complaining of headache when there is school

When should a Headache be investigated?

If the headache reduces after drinking coffee in the morning

→ Headache with neck stiffness and vomiting or with fits

Headache when there is work pressure. Headache when reading and when one has to strain

# MCQ on Head Injuries in Tamil





asia	രേതവി	சரியான பதில் (விருப்பத் தேர்வு)
0	தலைக் காயம்	உடரத்திலிருத்து விழுதல்
	ஏற்படுவதற்கான முக்கிய காரணம் என்ன?	வள்முறை தாக்குதல்
		<b></b> ന്ധീல വിവർള്ള
		இருசக்கர வாகன சாலை விபத்து
2	தீவிரமான தலைக் காயத்தை குறைக்கக் கூடிய முக்கிய காரணம் இவற்றுள் எது?	மண்டை ஒடு முறிவு
_		முளையின் வெளிப்புறம் ரத்த உறைவு
		மூனையில் நேரடி முதன்மைக் காயம்
		இவை எதுவுமே இல்லை
8	தலைக் காயத்துக்கான மருத்துவ முறைகளுள் முக்கியமானது இவற்றுள் எதுர	மண்டையோடு எக்ஸ் ரே
e		மூனையின் ஸீ.ம., ஸ்கேன்
		மீண்டும் மீண்டும் மருத்துவ கணிப்பாய்வு
		மீண்டும் மருத்துவ கணிப்பாய்வு மற்றும் மீண்டும் ஸீ டி. ஸ்கேன்
0	இவற்றுள் எது சரியான குறிப்பு?	தலைக காயத்தில் 1%க்கு மட்டுமே அறுவை சிகிச்சை தேவைப்படும்
•		எந்த விதமான தலைக் காயத்துக்கும் எக்ஸ் ரே நிச்சபம் வேண்டும்
		எல்லா தலைக் காயங்களுக்கும் எரி.டி. ஸ்கேன் கட்டாயம் தேவை
		மருத்துவ கணிப்பாப்வை விட எல். உஸ்கேன் மிக முக்கியமானது
6	இவற்றுள் சரியான குறிப்பு எது?	இருசக்கர வாகன விபத்தில் பலியானவர்களில் 97% பேர் ஹெல்மெட் (தலைக் கவசம்) அணியவில்லை
		ஹெல்பெட் அணிவதால் தலைவலி, கழுத்து வலி வரும்
		தலைக்கவசம் அணிந்தால் விபத்து தலைக் காயம் தடுக்க முடியாது
		ஹெல்மெட் விலை அதிகம்; மேலும் அதை வைக்க இடமும் இல்லை



Self assessment MCQ's enabled community to realize their knowledge gap in various health issues. Long term knowledge retention will also be monitored. Establishing improved health outcomes, following tele lectures, will convince the community of importance of Health Literacy

From: Jegan-Mssrf [mailto:jegan@mssrf.res.in]

**Sent:** Tuesday, August 13, 2013 12:56 PM

To: nva@mssrf.res.in; nva-rrinterns@mssrf.res.in

Cc: 'Srinivas S'

Subject: Reg:Participants detail for 13th Tele Health Education



13 th Tele Health Education On Head Injury					
S.No	Venue	District	Male	Female	Total
1	Nagercoil	Kanyakumari	2	112	114
2	M.Kalipatti	Salem	7	4	11
3	Melapatti	Pudukottai	0	0	0
4	Pudukottai	Pudukottai	9	47	56
5	Thiruvaiyaru	Thanjaur	15	47	62
6	Nochiodaipatti	Dindigul	28	14	42
7	Kizhur	Puducherry	0	0	20
8	Kolli hills	Namakkal	4	11	15
9	Thangatchimadam	Ramanadapuram	4	53	57
10	Nagapattinam	Nagapattinam	6	45	51
11	Vedaranyam	Nagapattinam	18	12	30
	Grant Total			345	458

Telelecture to 9 villages in Rural Tamilnadu from Apollo Hospitals Chennai



### Screen shot of attentive villagers listening to a tele lecture from Apollo Hospitals Chennai



Q&A Interactive Session with Villagers following talk on Diabetes



Q&A Interactive Session with Villagers following talk on Diabetes



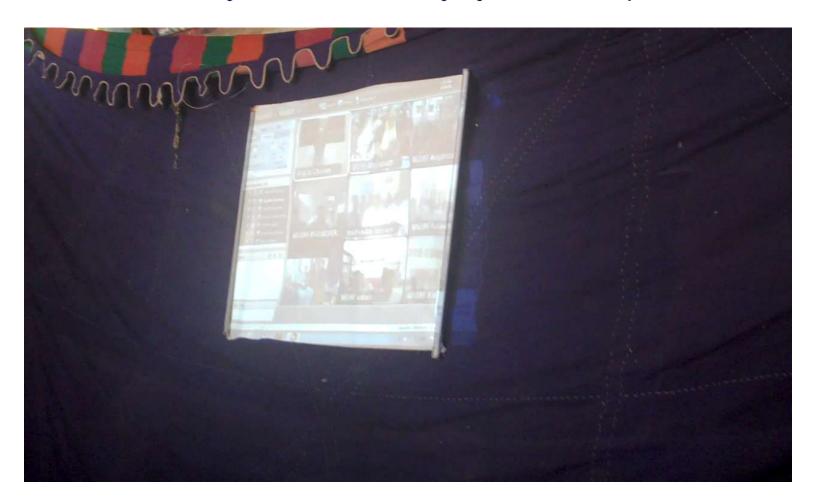
## Video showing interaction with participants in 8 villages



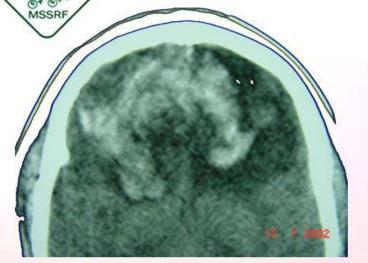
### Video of Participants filling questionnaire during Tele Health education programme

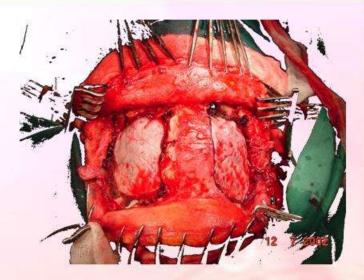


Participants in a Village listening to a Tele Health Education Talk Makeshift pandal in absence of proper Community Hall











70 வயது ஆண் தீவிரமான மூளை காயம் (இரு புறங்களிலும்)

> இரு வருடங்களுக்கு பின்னர்



### Apollo Hospitals Health Awareness Talks

#	Date	Session	Video Link
Session 1	15 <sup>th</sup> Feb 2013	Introduction to Diabetes	http://youtu.be/GtmQihiUNEc
Session 2	1 <sup>st</sup> Mar 2013	Management of Diabetes	http://youtu.be/pHqocmVDE-0
Session 3	15 <sup>st</sup> Mar 2013	Diabetes in pregnancy	http://youtu.be/17CRD-Zc8QU
Session 4	28 <sup>th</sup> March 2013	Heart Disease Prevention	http://youtu.be/dvzU44WuePs
Session 5	10 <sup>th</sup> April 2013	Kidney Disease Prevention	http://youtu.be/vEWFZ2N-c-Q
Session 6	26 <sup>th</sup> April 2013	Common Urological Problems	http://youtu.be/fARonnIPZvE
Session 7	9 <sup>th</sup> May 2013	Vitamin D Deficiency	http://youtu.be/41DAhyKb0VE
Session 8	29th May 2013	Common Ear Diseases	http://youtu.be/8v fTRGn7ls
Session 9	12 <sup>th</sup> June 2013	Jaundice	http://youtu.be/JcVj7HOozWs
Session 10	26 <sup>th</sup> June 2013	Hypertension	http://youtu.be/eARoJdnIPZvE

### Apollo Hospitals Health Awareness Talks

#	Date	Session	Video Link
Session 11	10 <sup>th</sup> July 2013	Burns	http://youtu.be/VzUj4WsuePs
Session 12	24 <sup>th</sup> July 2013	Diabetic Foot Syndrome	http://youtu.be/JdAKrTesDpik
Session 13	8 <sup>th</sup> August 2013	Management of Head Injuries	http://youtu.be/DrFqSt9kmae
Session 14	21st August 2013	Recognizing the Dangerous Headache	http://youtu.be/bijRyfP5yd0
Session 15	3 <sup>rd</sup> September 2013	Rectal Bleeding	
Session 16	18 <sup>th</sup> September 2013	Depression	
Session 17	23 <sup>rd</sup> October 2013	Fracture Healing and Management	
Session 18	6 <sup>th</sup> November 2013	How to keep your Heart Healthy	
Session 19	20 <sup>th</sup> November 2013	Community Ophthalmology	

### Apollo Hospitals Health Awareness Talks

#	Date	Session	Video Link
Session 20	4 <sup>th</sup> December 2013	Common Dental Diseases	
Session 21	19 <sup>th</sup> December 2013	Pediatric Neurology	
Session 22	2 <sup>nd</sup> Jauary 2014	Healthy Eating Healthy Living	
Session 23	22 <sup>nd</sup> January 2014	Menstrual Disorders	
Session 24	5 <sup>th</sup> February 2014	Common Problems in Gastroenterology	
Session 25	18 <sup>th</sup> February 2014	Common Urinary Problems	
Session 26	5 <sup>th</sup> March 2014	Thyroid and Other Hormones	

# Challenges in Improvisation & Escalation of eKnowledge Empowerment

Non availability of



- Adequate Bandwidth in villages → sub optimal Audio video quality
- NGO's with dedicated volunteers, accepted by the community
- A large number of doctors with excellent communication skills in the local language, who can relate to the audience & are willing to spend effort & time
- A dedicated research team to conduct an in depth impact analysis
- FUNDING!! FUNDING!! ultimately should be self sustaining







Urban consultants understand health concerns in rural India ?? Not all patients can, or want to be empowered

Patient
empowerment?
Viewed as shifting of
power, potentially
threatening to medical
professionals??

DIY - patients to be more responsible for their own medical care







#### Observations & Conclusions

26 Sessions bi monthly from 15th Feb to March 5th 2014

5471 attendees from 16 villages in rural Tamilnadu

Feedback Excellent 21%, V Good 22% Good 18% Satisfactory 39%

Knowledge Levels ↑ Avg 20%

? not familiar with MCQ (↓ In many instances !!)

? MCQ could have been designed better to cater to a rustic population

Interactive Q & A sessions extremely & consistently rewarding

PoC should be escalated & a robust scientific impact analysis carried out In multiple centres to demonstrate better Health Outcomes with emPowerment