

Best Practices:

First Best Practice

1. Title of the practice: Nurturing Research and Consultancy in Health Sciences institutions

2. Objectives:

The objectives of the best practice in research and consultancy initiative of the university in health sciences are:

- a) To augment interdisciplinary approach for advancement of learning, teaching and research activities among and between the constituent colleges of the university
- b) To enhance communication between the institutions so as to nurture and integrate consultancy initiatives
- c) To appoint faculty from basic (life) sciences research qualifications along with various medical/health sciences professionals so as to nurture interdisciplinary approach besides to help convert clinical outcomes into research outputs resulting in better health care delivery
- d) To develop a concept to commercialization process in development of new medicines
- e) To give the benefit of advanced medical research knowledge and outcomes for patient care, particularly where no alternate approaches are available

3. The Context: The synthesis of teaching and research is fundamental in any university. The university believes that research plays an important role in innovation driven global society and that research has become the key to prosperity and social well being. Research and Consultancy in Health Sciences institutions need nurturing and support as most of the faculty of such institutions are actively engaged in providing clinical services and teaching students at undergraduate and postgraduate level without sufficient time as well as direction to pursue research and consultancy activities. The limitation of time and completely occupied in a focused manner in a highly specialized area limits interdisciplinary approach and thinking process. Both these issues have been an impediment in nurturing research and consultancy in health sciences institution all over the world.

4. **The Practice:** The university considering that Research and Consultancy would be an important facet for its Vision and Mission in providing quality education to the students had taken several steps to strengthen its research initiatives with appropriate research policy, research infrastructure and hiring and training of human resource in an appropriate manner.

For the said purpose, the university had initiated following steps:

- i. Constituted a Research Coordination Council (RCC) to facilitate research in the university. Besides promoting research activities, the Research Coordination Council screens new research proposals of the faculty, monitor ongoing research projects and evaluate the completed research projects.
- ii. Establishment of Research Development Fund to support research scholars with fellowships and small grants so as to enroll research scholars from interdisciplinary background to pursue research at the university.
- iii. To appoint an eminent scientist as Director (Research) to provide leadership to research initiatives.

- iv. The RCC also Co-ordinates with institutional research co-ordinator and promotes collaboration between health industry and the university and its constituent colleges through a structured process,
- v. Timely publication of university research journal, "International Journal of Health and Allied Sciences" (available at www.ijhas.in), which is an indexed journal published by Medknow Publications and Media Limited, which is a part of Wolter Kluwers Health
- vi. Conduct of inter-disciplinary seminars, workshops and symposia with national and international experts and pioneers in health sciences research.
- vii. Identify established areas of research strength and strengthen available resources in those areas of research and doctoral study
- viii. Identify nationally/internationally faculty who can augment research and encourage them to join the university.
- ix. Develop the identified strengths mentioned above into potential nationally and internationally recognized centres of excellence.
- x. Achieve national/international recognition through publication of research articles in scientific journals, presentations in national and international scientific meetings and competing for national and international highly acclaimed awards.

5. **Evidence of Success:** The impact of research and consultancy advocacy within the university and outside the university is seen in terms of:

- i. Large number of Principal Investigator (PI) driven research projects supported by national funding agencies such as Department of Science & Technology, (DST) Department of Bio-Technology, (DBT) Defence Research & Development Organization (DRDO), UGC, ICMR, AICTE etc., to the tune of nearly Rs.13 crores in the last four years.
- ii. Nearly, 40% year on year on year increase in the research publications in various national and international peer reviewed journals and similarly an increase by 50% of the number of publications in high impact factor journals.
- iii. The conduct of industry driven research in the form of consultancy from the concept of commercialization; from product development to clinical trials; and from drug discovery to development and delivery has resulted in increase in the consultancy services in the last four years to the tune of nearly Rs. 4 crores.
- iv. The number of research scholars who had registered with the university for pursuing research leading to the award of Ph.D from health sciences graduates has enhanced substantially and visible through 137 scholars in various disciplines, including medicine and dentistry who have registered for the Ph.D program.
- v. Establishment of Centre of Excellence in Molecular Biology and Regenerative Medicine supported by Karnataka Vision Group of Science & Technology (VGST) and Department of Science & Technology and establishment of Centre of Excellence in Clinical Research and Trials supported by Clinical Development Services Agency of Department of Biotechnology, Government of India, New Delhi.
- vi. Highly recognised International and national research organizations and institutions willing to partner in research programmes in emerging areas.
- vii. Development of curriculum which is interdisciplinary and research focused in emerging areas

6. Problems encountered and Resources Required: Lack of enthusiasm and shortage of manpower in clinical specialties was always a major constraint. Lack of enthusiasm was

overcome by organizing training and orientation programmes with the faculty where approaches to research were simplified and assurances made to provide necessary technical and infra structural support to facilitate research. Besides, the university policy to hire at least 10% of additional faculty in each of the department beyond the statutory requirement for the purpose of nurturing research reduced the resistance among the faculty from clinical specialties and got them involved in research activities. The other constraint that affected the initiative was the financial resources and the same was overcome by writing support grants to various funding agencies and also by making the provision of the Research Development Fund at the university.

Best Practice:2

1. Title of the practice: Innovation in Health Sciences Education through interdisciplinary approach.

2. Objectives: Innovation in education in health sciences courses is to achieve the following objectives:

- i. To simulate interdisciplinary approach in health sciences education leading to the award of new/innovative degrees and diplomas.
- ii. Integrated approach between the health sciences and the basic sciences for advancement of knowledge and research.
- iii. To address the challenges faced by the pharmaceutical industry and the health industry in having human resource that is trained to improve the emerging needs and also capable of adopting to future needs.
- iv. To enhance the employability of the health work force on a competitive global platform.

3. The Context: The health sciences education is strongly regulated by the statutory bodies such as Medical Council of India, Dental Council of India, Pharmacy Council of India, etc., which provide regulations, curricula and experiential training in a structured manner making it mandatory for the institution to comply with and providing little or no scope for innovating in education. The university education whereas emphasizes and encourages interdisciplinary approach, integrated approach and innovative approaches to education so as to enhance the employability of the graduates, their knowledge and skills to current and in emerging areas and also be able to meet the challenges in a global workforce environment. JSS University predominantly offering health focused programmes was under constraint to offer only those programmes that are recognized by the statutory bodies. The university had to adopt interdisciplinary and innovative approaches to overcome the same and emerge to provide several First in India type of educational programmes.

4. The Practice: The constituent colleges of the university consisting of JSS Medical College, JSS Dental College and Hospital, JSS College of Pharmacy in Mysore and Ootacamund had strong research capabilities, highly qualified and well trained human resource and excellent research environment. Towards this end, the university augmented its resources to meet the above challenges and come out with innovative programmes that will either replace obsolete curricula or in addition provide latest trends in training and acquire best skills in health sciences sector. This was achieved by the following activities:

- a) Holding inter-disciplinary workshops, symposia and seminars that can look at integrated approaches to education for advancement of knowledge and skills.
- b) Identify programmes that could be offered with an interdisciplinary approach.
- c) Consult with stake holders and prospective employers about the relevance of the programme and employability of the graduates.
- d) Support the training programme with necessary infrastructure training of the existing manpower and invite adjunct faculty from industry and centres of excellence to provide support and guidance.

5. Evidence of Success: The University has been successful in introducing several interdisciplinary and "First in India" type of programmes which are listed below.

Faculty of Pharmacy	PharmD PharmD (PB) M.Pharm in Pharmaceutical Regulatory Affairs M.Pharm in Pharmaceutical Quality Assurance M.Pharm in Clinical Practice & Research PG Diploma programmes in Regulatory Affairs Pharmaceutical Quality Assurance Pharmaceutical Nano-technology Clinical Research Medicine & Poison Information Herbal Products and Standardization Bio-informatics Pharmacovigilance
Faculty of Medicine	M.Sc. Basic Medical Sciences MD in Emergency Medicine MD in Hospital Administration
Faculty of Life Sciences	BSc in Environmental Science MSc in Cognitive Neurosciences MSc in Environmental Sciences MSc in Geoinformatics MSc in Nanoscience & Technology
Faculty of Management Studies	MBA Hospital Administration MBA Pharmacy Administration
Faculty of Biomedical Science	BSc in Medical Laboratory Technology BSc in Imaging Technology BSc in Anesthesia and operation theatre technology BSc in Renal Dialysis Technology BSc in Respiratory Care Technology BSc in Perfusion technology BSc in Cardiac Care Technology BSc in Physician Assistant Course BSc in Emergency Medicine Interdisciplinary Courses MSC in Forensic Odontology MSc in Clinical Embryology
Faculty of Dentistry	PG Diploma in Dentistry Oral & Maxillofacial Surgery Prosthodontics Crown & Bridge Conservative Dentistry & Endodontics Pedodontics and Preventive Dentistry Periodontology
Other Programmes	Certificate Programs in Principles of Clinical Pharmacology and Introduction to the Principle and Practice of Clinical Research

6. Problems encountered and Resources Required: The major problem in this phase was to identify appropriate and willing faculty and departments to work together in setting the modules for the study programmes. Secondly, strengthening of infrastructure was required in

interdisciplinary areas which had to be located in an interdepartmental area to avoid hierarchical restrictive practices.

The challenge was overcome by identifying willing faculty and exposing them to such emerging areas and training them so that they will be confident to pursue the experiments. The second challenge was overcome by establishing centralized research facility to be commonly used by collaborating departments.

Best Practice:3

1. Title of the practice: Internationalization – The engine of Globalization

2. Objectives:

The objectives of the best practice in internationalization and globalization initiative of the university in health sciences are:

- f) To increase the international presence of the University leading to a global University
- g) To develop a new model of institution where students and faculty earn degrees from various international locales through global partnerships and satellite campuses thereby becoming a non-traditional institution in the sense that we have no geographical borders
- h) To foster collaborations in research with international research universities to augment the research activity in the university
- i) To develop collaborative science and scholarship
- j) To augment interdisciplinary approach for advancement of learning, teaching and research activities among and between the constituent colleges of the university
- k) To develop a concept to commercialization process in development of new medicines
- l) To give the benefit of advanced medical research knowledge and outcomes for patient care, particularly where no alternate approaches are available

3. The Context: Development of an international market for college level research and teaching has stimulated a sharp increase in university entrepreneurialism. Increased availability of knowledge creates competition among higher education institutions to keep up with the growth in specialized knowledge and control a market share in its development and distribution. Institutional status depends on being able to contribute to acquisition and dissemination of knowledge at its frontiers. To remain competitive, higher education institutions require increasingly substantial fiscal resources, financial support, requires establishing and maintaining a reputation for academic excellence. This reputation, in turn, is enhanced by pursuing the very best student and faculty talents even if it means investing heavily in recruiting across national borders.

5. The Practice: The university considering that internationalization and globalization would be an important facet for its Vision and Mission in providing quality education to the

students has taken several steps to strengthen its outreach initiatives with appropriate global policy, research collaborations and hiring and training of human resource in an appropriate manner.

For the said purpose, the university had initiated following steps:

- xi. Appointed a Dean with sufficient international experience for Global initiatives to provide leadership and overlook international collaborations and rankings.
- xii. Organize Indo-US conference every two years inviting eminent scientists with medical background to provide impetus to research
- xiii. Entered with Memorandum of Understanding (MoU) with prominent universities outside India reaching from far east to the far west.
- xiv. The RCC also Co-ordinates with institutional research co-ordinator and promotes collaboration between health industry and the university and its constituent colleges through a structured process,
- xv. Timely publication of university research journal, "International Journal of Health and Allied Sciences" (available at www.ijhas.in), which is an indexed journal published by Medknow Publications and Media Limited, which is a part of Wolter Kluwers Health and listed in the NLM Catalogue
- xvi. Conduct of inter-disciplinary seminars, workshops and symposia with national and international experts and pioneers in health sciences research.
- xvii. Identify established areas of research strength and strengthen available resources in those areas of research and doctoral study
- xviii. Identify nationally/internationally faculty who can augment research and encourage them to join the university.
- xix. Develop the identified strengths mentioned above into potential nationally and internationally recognized centres of excellence.
- xx. Achieve national/international recognition through publication of research articles in scientific journals, presentations in national and international scientific meetings and competing for national and international highly acclaimed awards.

6. **Evidence of Success:** The impact of research and consultancy advocacy within the university and outside the university is seen in terms of:

- viii. Indo-US conferences – The University has successfully conducted two major Indo-US conferences with MoU's signed with prestigious Universities of the USA such as Penn State Hershey School of Medicine and Johns Hopkins Bloomberg School of Public Health
- ix. MoU with prominent universities with student and faculty exchange. Currently JSS University has MoU with La Trobe University, Australia, AIIMS University, Malaysia, Khon Kaen University, Thailand, Maastrich University, Netherlands, Mayo Clinic, USA, Penn State Hershey School of Medicine, USA and Johns Hopkins School of Public Health, USA to name a few.
- x. Student and Faculty Exchange – Few faculty have been appointed as visiting faculty in partnering universities abroad and there has been student exchange programs also with students of La Trobe University, Australia visiting JSS University institutions.
- xi. Joint proposals submitted to funding agencies with large number of Principal Investigator (PI) driven research projects supported by national funding agencies such as Department of Science & Technology, (DST) Department of Bio-Technology, (DBT) Defence Research & Development Organization (DRDO), UGC, ICMR, AICTE etc., to the tune of nearly Rs.13 crores in the last four years.
- xii. Nearly, 40% year on year on year increase in the research publications in various national and international peer reviewed journals and similarly an increase by 50% of the number of publications in high impact factor journals.
- xiii. The conduct of industry driven research in the form of consultancy from the concept of commercialization; from product development to clinical trials; and from drug discovery to development and delivery has resulted in increase in the consultancy services in the last four years to the tune of nearly Rs. 4 crores.
- xiv. The number of research scholars who had registered with the university for pursuing research leading to the award of Ph.D from health sciences graduates has enhanced substantially and visible through 137 scholars in various disciplines, including medicine and dentistry who have registered for the Ph.D program.
- xv. Establishment of Centre of Excellence in Molecular Biology and Regenerative Medicine supported by Karnataka Vision Group of Science & Technology (VGST) and Department of Science & Technology and establishment of Centre of Excellence in Clinical Research and Trials supported by Clinical Development Services Agency of Department of Biotechnology, Government of India, New Delhi.

xvi. Highly recognised International and national research organizations and institutions willing to partner in research programmes in emerging areas.

6. Problems encountered and Resources Required: Lack of enthusiasm and shortage of manpower in clinical specialties was always a major constraint. Lack of enthusiasm was overcome by organizing training and orientation programmes with the faculty where approaches to research were simplified and assurances made to provide necessary technical and infra structural support to facilitate research. Also visits to International Universities by few faculty and understanding the process of learning and research gave a proper direction in the way things can be organized. Besides, the university policy to hire at least 10% of additional faculty in each of the department beyond the statutory requirement for the purpose of nurturing research reduced the resistance among the faculty from clinical specialties and got them involved in research activities. The other constraint that affected the initiative was the financial resources and the same was overcome by writing support grants to various funding agencies and also by making the provision of the Research Development Fund at the university.

Best Practice:4

1. Title of the practice: Innovation in Teaching Learning Methodology – Community outreach and its impact

2. Objectives: Innovation in education in health sciences courses is to achieve the following objectives:

- v. To simulate community approach in health sciences education leading to the better understanding of health associated problems at the community level
- vi. Making students as partners in community based programs
- vii. To understand community problems and thereby developing and implementing programs to encounter the health issues of the community
- viii. To enhance the outreach of Government initiative and also partner with private organizations in the upliftment of the community

3. The Context: The individual and the community are two different facets in health care delivery systems. The individual approach has by far reach a state of excellence with state of art hospitals providing quality health care but the outreach to the community has yet to achieve great milestones. As a health sciences university, JSS envisages to have a strong presence not only as a health care provider for individual but have a strong presence as community health care promoter. Taking health care initiative to the community has many challenging and requires a constant and continuous drive to overcome the barriers to health care in the community at large

4. The Practice: The constituent colleges of the university consisting of JSS Medical College, JSS Dental College and Hospital, JSS College of Pharmacy in Mysore and Ootacamund have designed community based programs based on the institutional strength and available resources. Each constituent college designs and implements its own novel community based programs partnering with the students of the college. The practices being followed are:

I. Model Health Village Project

- e) Model Health Village Programme Suttur (MHVPS) – The JSS institutions have adopted a village named Suttur situated in the Nanjangud Taluk of Mysore District and the programme has been named as MHVPS.
- f) A complete survey of the 5000 people of the village along with creation of complete database of name, occupation, household details, ailments and other information has been created for each individual. A card has been issued to each

family wherein on swiping the card all details regarding the family can be accessed.

- g) The JSS Medical College & Hospital not only provides free healthcare to the entire village but also conducts health awareness programmes, studies the pattern of the diseases occurring in the village and provides necessary promotional activities.
- h) The JSS University has also established a peripheral hospital at Suttur to create a health care facility and provide secondary health care facilities at a primary health care centre.

II. SMARAN Project

Dr Somashekhar and Malati Munavalli Health and Wellness foundation sponsored health education project (SMARAN project) is being implemented through, JSS Medical College & Hospital in northern districts of Karnataka. The objective of this project is to create awareness among villagers through the following activities:

- a) To conduct and organize lectures, demonstrations and clinical screening on various health related problems such as heart diseases, diabetes, cancer, blood related problem etc. by professionals and qualified experts
 - b) To prepare brochures and bulletins and other useful audio-visual aids on various diseases in simple language for free distribution among general public in large.
 - c) To create audio-visual aids for demonstration and exhibitions as often as necessary and needed to educate ordinary people.
- a) The project has been initiated with a spirit of providing comprehensive health education to villagers through health camp approach. In this regard first attempt was made in December 2012 by organizing a health education and health check-up camp in a village at Belgaum district.
 - b) In 2013 and 2014 the project was implemented in 5 backward villages of Dharwad district
 - c) In 2014-15 the project is under implementation at Vijayapura (Bijapur) District with the thrust areas on hypertension, diabetes, anemia, mother and child care.

National Service Scheme (NSS)

The NSS units of the constituent colleges have been actively involved in the community outreach activities with the involvement of student NSS volunteers. Each constituent unit of NSS has adopted a village for a period of 3 years wherein periodic surveys, free health camps, health awareness campaigns are organized along with catering to social and

professional needs of villagers. The NSS units have been phenomenal in bringing about a change in the perception of health among villagers

6. Evidence of Success:

MHVPS

The University has been successful in creating a database of 5000 individuals with geospatial mapping of the ailments in the village of Suttur in Nanjangud taluk of Mysore District. The University has over a period of 5 years significantly added to the health indicators of this particular village namely: the literacy rate, maternal mortality rate, infant mortality rate, death rate per 1000 population and many more indices. The health care providers have undertaken extensive environmental and sanitation surveys through which breeding centres of mosquitoes have been removed. There has been identification of lack of toilets at houses and toilets constructed in coordination the local gram panchayat.

SMARAN Project

After the implementation of the project, there was significant improvement on knowledge of hypertension, diabetes, anemia and breast feeding and immunisation in the project villages. Involvement of community level link workers has found to be effective in delivering health related information to the community. Health education along with service provision in the areas of diabetic retinopathy has motivated the patients visiting local health facilities. Innovative intervention measures like moon light dinner and pregnant mother honouring programmes have attracted community members for attending health education sessions. Totally 3500 individuals staying in 5 villages received health education through 5 community link workers over a period of 15 months.

NSS Initiatives

The NSS through its village adoption schemes has not only oriented the health care students to understanding the problems in the community but also made them understand the difficulties in design, development and implementation of community outreach activities. Understanding the local needs forms the basis of developing any community based initiative. The NSS has partnered with many local bodies to cater to the needs of the community at large and has successfully garnered resources and mobilized it for the benefit of the community mainly in the field of healthcare.

7. Problems encountered and Resources Required:

- a. Identification of Local NGO's and administrative agencies
- b. Identification and training of link workers at village level
- c. Conducting health education sessions at the time when the people in the village are available
- d. Mobilisation of resources from Mysore to Project districts
- e. Local stay and food at villages

These problems have been overcome by the involvement of local people, partnering with NGO's and avail resources within the village. Funding through public-private partnerships has helped overcome the financial needs to support the community projects.

Extension & Outreach Activities - Identifying, developing and implementing programs for the achievement of sustainable healthcare outcomes

This is one of the largest community extension project implemented by JSS University through its constituent colleges with the support of Dr Somashekhar and Mrs. Malthi Munavalli Health Wellness Foundation through Dr Somashekhar and Mrs. Malathi Munavalli Health Awareness Project for Rural Areas of North Karnataka (SMARAN) project and Colgate India Ltd through Colgate Bright Smiles, Bright futures program.

1. **Title of the Practice:** Identifying, developing and implementing programs for the achievement of sustainable healthcare outcomes

2. **Goal:**

- To implement a self-sustainable health awareness model in resource limited localities of North Karnataka
- To implement a self-sustainable Oral Health Model in residential schools near Mysuru Karnataka

Objectives:

- To conduct and organize lectures, demonstrations and clinical screening on various health related problems such as heart diseases, diabetes, cancer, blood related problem etc. by professionals and qualified experts
- To prepare brochures and bulletins and other useful audiovisual aids on various diseases in simple language for free distribution among general public in large.
- To create audiovisual aids for demonstration and exhibitions as often as necessary and needed to educate ordinary people.
- To Implement educative oral hygiene sessions through demonstrations and reinforcement through caretakers on oral health related habits such as oral hygiene maintenance, oral hygiene aids and teeth friendly diet.
- To develop and distribute teaching material explaining oral health and hygiene practices through easily understandable simple audio video Presentation for school caretaker's teachers and children.

3. **The Context**

SMARAN Project

Reaching larger section of population need more number of link workers and supervisors, but in rural areas getting such people is a difficult task. Sometimes link workers face difficulty in answering the queries raised by the villagers on these thrust areas, thus we are thinking of technology driven awareness sessions through interactive E gadgets, and telemedicine approaches. We are working towards locally tailored health education materials adapting the local language and culture which need larger intellectual inputs from experts and community. There is also a demand for increasing the number of health check-up camps and increasing advocacy for the community mobilization.

Dental Awareness Project

Oral health care and preventive dental education have not been provided to the children of school going age and many dental problems could be avoided by proper oral hygiene and care. Hence it was thought to develop a sustainable dental awareness program which can meet these objectives and prevent diseases related to oral hygiene.

4. The Practice:

SMARAN Project

This project is to be implemented in six districts of North Karnataka out of which three districts are covered so far. We established collaboration with local branches of Family planning Association of India, an NGO with larger field based activities in the health sector. With the help of this organization and district health administration, we have identified five most backward villages in each districts (which are devoid of health benefits and situated far away from district headquarter) for implementation of project activities. Based on the consultation with community leaders, villagers, health care authorities of the specific districts and sponsoring authorities, the final thrust areas for health education activities decided were, Hypertension, Diabetes, Anemia and issues related to MCH (Mother and Child health). Health awareness materials like handouts and pamphlets in local language were prepared to deliver the health education messages. In order to achieve sustainability, local link worker empowerment approach was adapted. The model is identifying one highly motivated, service minded person from each of the villages (link worker) and training them on the thrust areas by a group of experts, in two contact sessions and intern utilizing them for delivering health education activities in the community. This model has helped us to solve most of the challenges mentioned in section 3, like aligning with socio-cultural milieu, establishing rapport with community, improve credibility and community mobilization. This model also helped us to reach the larger section of the community through the community participation.

Few innovative approaches in health education sessions adapted by the link worker are moon light shared dinner health awareness sessions, pregnant women honouring programme for mobilizing women for awareness sessions related to mother and child health issues. A good supportive supervision and monitoring mechanism is established where one supervisor from the local collaborative agency will visit the awareness sessions being delivered by the link worker and provides inputs for the performance. A team from JSS Medical College undertakes regular supervisory visits to monitor the project related activities.

Health camps are being conducted in these areas, to screen people for the common health related ailments and treatment is provided on the spot. The patients requiring specialized care are referred to district hospital for further management. This opportunity is also utilized for providing health education to the people on the thrust areas under the project. The camps have acted as tools for community mobilization for the awareness sessions.

Dental Awareness Project

This project is to be implemented in residential schools of Mysore Taluk Karnataka out of which follow up in 2 are covered so far. We have established collaboration with local branch of Indian Dental Association and Colgate Bright smiles, bright futures organization. With the help of this organization and school education administrators, we have identified residential schools for implementation of project activities. Based on the consultation with the sponsoring authorities, the thrust areas for health education activities decided were on oral health through demonstrating oral hygiene method and audio video presentation in local language. In order to achieve sustainability, local dormitory teacher empowerment approach was adapted. The model is identifying highly motivated, caretakers from each of the residential school and training them on the thrust areas by a group of experts, in two contact

sessions and in turn utilizing them for delivering oral health hygiene education activities in the school on regular basis.

Few innovative approaches in oral health education sessions adapted by this program are delivery during the TV time which enhances receptivity of children. Also the team from JSS Dental College undertakes regular supervisory visits to monitor the project related activities.

Oral Health camps are being conducted in these schools to screen children or the common oral health related ailments and minor treatment is provided on the spot and on the portable dental unit. The patients requiring specialized care are referred to the Dental Section at the Local hospital for further management.

5. Evidence of Success:

SMARAN Project

A total of 24,810 people across 12 villages in three districts are covered under the project so far. 1545 health awareness sessions, involving twelve village level link workers and 8 supervisory staff from the FPAI were conducted. 5200 people underwent health check up and received treatment in 21 health camps across these villages. 1200 school children across four schools have also received health education through 15 sessions. The knowledge of villagers about the causes, symptoms, prevention and treatment of the diseases like hypertension, diabetes, anemia and MCH problems were found to be poor in the base line survey (survey conducted before educational interventions), the terminal survey results after series of health education activities have shown that there were significant improvement in the knowledge related to above mentioned domains.

Assessment of qualitative factors like acceptability of the awareness activities, attendance to the sessions, satisfaction with services, cooperation with link workers, participation in health camps, seeking care for these ailments have also improved over a period of time. Feedback from link workers also suggest that they feel empowered by the project and are able to help their villagers with their knowledge obtained through the project.

Dental Awareness Project

A total of 1345 children across the 2 schools are covered under the project so far. Sixty oral health awareness sessions involving 50 teachers/dormitory teachers cum care takers has been done. The School children of 2 schools have received oral health education annually from the last 20 years. The education involved live oral hygiene demonstration through a simple lesson in the local language. The knowledge of care takers and children about the oral hygiene circular brushing method was found to be poor in the base line survey using KAP assessment and in the survey results after series of oral health education have shown that there was significant improvement in the knowledge related to oral health care.

Assessment of qualitative factors like acceptability of the awareness session, attendance to the sessions, satisfaction with education program and cooperation with caretakers for oral wellbeing of the children by bringing change in oral Hygiene practises is being taken on a periodically. Feedback from caretakers also suggest that they feel empowered by the project and are able to help the children with their training on the Dental knowledge, attitude and practises obtained through the project.

6. Problems Encountered and Resources Required

SMARAN Project

- The SMARAN project had to be implemented in Northern Part of Karnataka with its administrative centre in Southern part of the state, Mysuru, which are situated almost 500 Kms apart. Thus it was difficult job to go there in- person and deliver the services by the team situated in the institution.
- The second challenge was to get in tune with the socio-cultural specificities of the target population, especially the language, familial and community relationships, social structure, communication etc.
- Gaining the confidence of the target population was the third important challenge. As the implementing institution is far away from the service zone and people were not aware of the community extension activities offered by our organization. This has raised the issue of credibility and acceptance of the project related activities and services.
- Fourth challenge was mobilizing the people to accept the awareness messages and adapt them for positive behaviour change.
- The dental awareness project was implemented at the residential schools in the rural area near Mysuru of Karnataka, India. Though within the accessible distance it was difficult job to go there in- person to train the caretakers and educate the children and deliver the services by the trained caretakers of the dormitory residential team situated in the institution and to conduct quarterly revision on dental hygiene during the free hours for 15 minutes on weekends during the TV shows Time.
- Delivering the oral Hygiene method in a standardised manner through the trained caretakers was a challenge. At the implementing institution the authorities were not aware of the pre-recorded oral Hygiene method training activities offered by our organization to train the children and caretakers.
- Another challenge was to accept the oral hygiene brushing sequence method and adapt them for positive behaviour change in the children in turn through audio-visuals and caretakers of the dormitory.

Dental Awareness Project

- Reaching larger number of schools need more number of caretakers trained. Sometimes caretakers face difficulty in supervising the oral hygiene method by the children all at a time in groups, Thus we propose to have display charts near the brushing area and advice to use audio guided brush. We are intending to improvise locally tailored oral health education materials for the posters adapting the local language and culture which need larger intellectual inputs from experts, school teachers and community.

Best Practice: 6

JSSU Online: An IT Framework to support Pedagogical Innovation

Title of the Practice: JSSU Online: An IT Framework to support Pedagogical Innovations.

Goal:

To develop and support Active Learning and Pedagogical Innovations in the University by providing an IT Framework around which capabilities are built to support and sustain innovations in Education Delivery and Management.

Objectives:

To develop a Cloud based IT Framework to deliver IT capabilities to support the needs of Faculty, Students and their Parents.

To develop an information repertoire to support the needs of the University.

The Context

Given the current developments around Technology and the opportunities that it offers to expand the globalization of Education, it is imperative to be in the forefront in the Knowledge Industry through Pedagogical Innovations through the implementation of ICT.

Currently, Education is imparted to Students through the traditional method of teaching. But research has shown that the learning methods have undergone a sea change in view of the developments around ICT.

The exposure levels of students to the tools and technologies makes it easy for educationists to leverage the enormous potential of ICT to innovate in the field of Education.

The Practice:

JSSUOnline, is an IT Framework, through which we are now able to deliver our Educational resources to students anywhere and anytime on any computing device. JSSU Online is envisaged to provide a host of capabilities around educational resource delivery and control in phased manner to all the constituent colleges of JSS University as part of its IT Roadmap. Some of the capabilities which are part of the framework are:

Time Table Schedule & Management

Teaching / Study Plans Automation

Teacher's Diary for reporting

Student's Attendance / 360⁰ Feedback

Digital Content Management at Course / Subject / Chapter and Topic level

Multi location sharing of digital content

MCQ based Examination with the ability to build a Question bank with difficulty levels and then administering to the targeted audience anytime.

Research Profile of Teaching Faculty

JSSU Online IT Framework is envisaged to continuously evolve under the strategic IT Operating model fulfilling all aspects of our University requirements in its quest to achieve excellence.

Evidence of Success:

Staff / Student and Stakeholder Satisfaction levels

Reduction of Manual Process

Educational Content Availability and Access

Problems Encountered and Resources Required:

Lack of trained and experienced manpower, who understands the needs of both Education and Technology. The interlinking of thoughts which can be converted to practice and the resistance to accept possibilities due to difficulties in preparation are some of the challenges encountered.