

## Two best practices of the University

### First best practice

#### 1. Title of the Practice –Faculty Development Programs: An initiative by University

##### University Department of Education for Health Professionals (UDEHP)

“The paradigm shift away from teaching to learning has encouraged power to be moved from the teacher to the student”.

#### 2. Objectives of the practice:

- a. To train the health science professionals in basics and advances in educational science and technology.
- b. To develop competence in clinical and educational research.
- c. To achieve excellence in patient care, through evidence based practice, clinical decision making and good clinical practice.
- d. To impart leadership qualities, social and executive communication skills in order to achieve continued professional excellence.

#### 3. The Context :

**What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words) ?**

Under the ambit of UDEHP, the educational sub-units of the Constituent Colleges such as, Department of Medical Education (DOME), Department of Dental Education (DDE), Department of Ayurveda Medical Education (DAME), Department of Physiotherapy Education (DPE), Department of Nursing Education (DNE) and Department of Pharmacy Education (DPHE) conduct regular educational programmes to cater to the needs of the respective health science professionals.

- Due to ever-growing demand for skilled professionals and rapidly expanding science of education, there has been a paradigm shift in practice of educational science and technology.

**Challenges:**

- Though training in how to educate seems trivial, there is a need for training all the teachers in educational science and technology with deliberate practice of the skills learnt to achieve excellence.
- Devoting substantial faculty time into such training programs.
- Resistance to change and adapt to the newer technologies.
- Lack of mandate on quality of teaching and learning, patient-care and research by the regulatory councils.
- Failure to realize the importance of professional development by the faculty
- Lack of motivation

**4. The practice :**

**Describe the practice and its uniqueness in the context to find a higher education. What were the constraints / limitations, if any, faced (in about 400 words)?**

- The professional development initiative for the faculty by UDEHP started soon after the establishment of University, one of its kind in the country. The DOME of JNMC is one of the earliest centers to begin faculty development training program in the year 1989. The said department has conducted ten international workshops in collaboration with University of Illinois, Chicago, USA.
- To date, UDEHP has trained more than 4200 professionals under 128 such educational programs.
- The Department has also catered to the needs of the postgraduate students by conducting both, basic and advanced training programs in research methodology and Medical Education Technology. This initiative has not only inculcated the research temperament in the faculty, but also has improved the health-care. There is enhancement in quality and number of research publications and application of evidence-based practice for health-care.
- Analysis of the feedback on these programs by the participants is highly encouraging and has shown that there is improved personal and professional development in-terms of, knowledge gain, skills acquired, enhanced communication, organizational and managerial skills.

## **5. Evidence of Success ;**

**Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.**

- Many of the innovative practices related to education, health-care and research have been implemented at various levels, after they were learnt through faculty development programs, like practice of Evidence Based Health Care, implementation of OSCE/OSPE at internal examination, development of various curricula, incorporation of ICT in the classrooms, development of quality MCQ banks, etc. The innovative practices of UDEHP have been emulated by other higher education institutions.
- DOME has been functioning as **MCI recognized regional training centre** in imparting basic medical education technology for teachers of 15 medical colleges earmarked by MCI.
- DOME has also been recognized as a **Nodal Center by MCI for training teachers of 39 medical colleges of Karnataka, Andhra, Telangana and Goa** in advanced medical education technology.
- Department of Pharmacy Education is approved by AICTE as **National Nodal Centre for training of the teachers in pharmacy** for the years 2010 to 2013.
- Fourteen teaching modules for in-service staff nurses are regularly being conducted by UDEHP.

## **6. Problem encountered and resources required :**

**Identify the problems encountered and resources required to implement the practice (in about 150 words).**

- Health education which is teacher-centered and classroom-oriented system practiced in India is the legacy of British practice which is being in practice even after independence.
- The concept of a basic health professional is to serve the community, meeting the basic health care needs of a common person. However, this concept is grossly being neglected by training health care professional students, restricting them

within four walls of the institute, and maintaining teacher-oriented and training in tertiary-care centers.

- Our teachers have continued to copy their teachers in transferring knowledge, skills and practices, without making any efforts to analyze whether it promotes learning in students.
- The role of present day teacher is not mere teaching, but it is teaching and learning experience. For this change to come, Herculean efforts are needed to change the mind-set of a teacher. This means the teacher should be ready to accept the newer changes in teaching, learning and evaluation process.

The challenges faced were mainly in-terms of:

- Lack of motivated participants.
- Lack of devoting time by faculty into such training programs.
- Non-compliance.
- Failure to realize the importance of continuous professional development.
- Resistance to adapt the newer trends in teaching- learning and assessment.

**Resources:**

**Manpower – Resource Person** : In-house interested faculty were identified and trained as Trainer of Trainees (ToTs) at national (JIPMER, Pondicherry, PGI, Chandigarh and FAIMER, Coimbatore) and International (Department of Medical Education, University of Illinois, Chicago, USA) centers. These trained personnel and other senior faculty members established **Department of Medical Education at J. N. Medical College in 1989** through which other constituent units ToTs were trained. These trained ToTs of constituent units established Educational Department in their respective institutions. With the inception of the University, the **UDEHP** was established which enhanced the functioning of these Educational Departments of the Institutions through various programs. For this, the paramount importance is unbridled support and encouragement of the management.

**7. Notes:**

**Optional. Add any other information that may be relevant for adopting/ implementing the Best Practice in other institutions (in about 150 words).**

The services of the faculty members of the UDHEP / DOME were appreciated by many of institutions, near and far. As a result these trained and experienced faculty in

professional health education were invited by various institutions to sensitize their faculty in following areas.

1. Teaching Methodology

2. Research methodology

3. Micro-teaching

4. OSPE/OSCE

5. Evaluation Reforms

- In addition the UDEHP started the PG diploma in advanced medical education in collaboration with department of Medical Education of University of Illinois, Chicago (UIC), USA through which the in-house and other faculty members from other institutions have been benefited.
- The UDEHP also conducts training programs for the teachers of other educational institutions (including schools) at their invitation.

**Second Best Practice of the University:**

**Public Private Partnership In Health Care An Initiative By Kje Academy Of Higher Education And Research: To Take The Advances In Health Care To The Unreachable**

**a) Objectives of the practice**

- a. To get insight into the community health profile.
- b. To provide the same quality of health care to the unreachable population as that is provided at corporate /advanced health facilities.
- c. To create awareness and educate the community about health / care.
- d. To update / improve the knowledge skills and attitude of the community health care providers
- e. To strengthen effective communication network between primary care facilities to tertiary care facilities
- f. To improve the overall health profile of the community.

**b) The context:**

- a. To achieve the Millennium Development Goal 4 and 5.
- b. Every health care institute must strive in preventing the deaths and disability by providing quality care.
- c. The main reasons for poor outcomes are 4 delays:
  - i. Delay in seeking care
  - ii. Delay in diagnosis
  - iii. Delay in transfer
  - iv. Delay in effective treatment at higher facility
- d. Need for comprehensive health care: which include dental, physiotherapy, pharmacy, ayurveda along with modern medicine.

**Challenges:**

- Being private institute, working with or co-ordinating with public sector health care providers
- Attitude / aptitude of public health care providers
- Availability of faculty, time and feasibility due to the assignment at the institute

- To create proper methodology or means to approach community

### c) **The Practice**

- In 1999, the milestone collaboration was established between this institute (JNMC) and University of Illinois which helped to strengthen the collaboration.
- Due to the experience of HRRCC – 215 and with some exposure to field research experience with ICMR since 1984, it was possible to practice.
- The faculty underwent training in research methodology through ICMR by CDC 1996.
- With historic Misoprostol trial for prevention of PPH, which is one of the leading cause of maternal mortality, a public private partnership between this institute and district health administration made humble beginning to work with 21 sub center (ANM's) areas of 4 PHCs in Belgaum district from 2001 to 2006. Now, it covers 90/244 PHCs areas of three districts covering population of 18,83445.

### **Steps taken: In the community**

- a. The team had series of meetings with village leaders and community members to inform about the project, the benefits and their roles/ responsibilities and to seek support for health care provider and arrange for timely transport in emergency.
- b. All health care providers, ANM's, MOs were trained and were involved in supervision. Other district health officials worked as Field Research Officers (FROs). The faculty at tertiary care center were updated and contact information was provided to Community Health workers.

**The outcome was not a single maternal death in 1620 deliveries though there were >30 referrals.**

- Institute established the Research Foundation.
- Created awareness on harms of tobacco use in pregnancy by survey from 2004-2007 with support of medical officers and health care providers.
- Important areas for improvement were identified
- Faculty members are efficiently trained
- Involvement of public sector workers in the team

- Use of available facilities and system practices : village health committees, monthly meetings of staff, surveys, Married Woman of Reproductive Age (MWRA) (eligible couple), etc. were further strengthened.
- Community health workers skills and knowledge updated by training.
- Support and permissions from higher health officials – state district and local obtained
- Involvement of elected representatives as ascertained.
- Community awareness and education by series of meetings, discussions were arranged through health care providers
- Proper network with peripheral health workers and central team members and with district health administration with improved communication details was developed.
- Provision of financial incentives for the extra work of CHWS and support staff was made.
- Quality health care with human touch at the tertiary facility was provided.
- Feedback was obtained and necessary corrective measures were taken.

**d) Evidence of success**

It is recorded in each of these activities as follows:

- a. **PPH:**
  - i. Not a single maternal death out of 1620 deliveries in Misotrial.
  - ii. Government of India brought the changes in its guidelines and accordingly misoprostol drug was included for prevention of post-partum hemorrhage, where injectable oxytocics are not available.
  - iii. Now this Drug is used in more than 26 countries.
  - iv. WHO included Misoprostol in essential drug list.
  - v. ANM's guidelines recommended.
  - vi. Published in **LANCET** in Oct-2006 with impact factor of **39.53** and citation index of **254**.
- b. **First Breath Study :**
  - i. Reduction in NMR and PNMR



- ii. Navajati Shishu Suraksha Karyakrama (National Program) is an outcome based on this study.
- iii. Innovative approaches to see and examine the new-born within 24 hours of birth.
- iv. Process of tracking every pregnancy in the community was initiated in this study,
- v. The results published in **New England Journal of Medicine** (NEJM) in 2010 with impact factor of **54.42** and citation index of **139**.

**c. Emergency obstetric and new born care (EMNOC)**

- i. The project Improved the skills and knowledge of CHW's in maternal and new born care.
- ii. It also improved home based life saving skills in the community members.
- iii. This project reduced PNMR, NMR and MMR in the local area thus, strengthening the NRHM programme.

**d. Maternal New-born Health registry (MNH).**

- i. More than 150000 pregnancies are enrolled and tracked up to 42 days after delivery with 99.9% follow up.
- ii. This is the basis of data for many interventions to take up in community.
- iii. Today, because of this we are able to provide the correct indices rates on
  - 1. Pre-Term Labor
  - 2. Neonatal Mortality Rate-early & Late
  - 3. Still birth rate
  - 4. Maternal Mortality Rate.
  - 5. Miscarriage rates, etc.

**e. Ante-natal Corticosteroid Trial (ACT)**

- i. Helped in identification of women with Pre-term Labour (PTL) in the community.
- ii. Improved use of Ante-natal Corticosteroid which improved the new born survival.

- iii. Promoted the activities of CHW's through pregnant women and mothers meetings.
- iv. Created awareness among the scientific community with reference to morbidity and mortality in babies born after the pre-term period.
- v. Published in **LANCET** in Oct-2014.

**f. Helping Babies Breathe (HBB) :**

- i. This project developed the skills in CHW and care-providers at various levels of health-care facilities including, tertiary-care facilities for new born resuscitation and care.
- ii. This improved the new-born survival
- iii. The daily practice of this program brought near perfection in the skills.
- iv. The success of this procedure made to incorporate this program into the curriculum.
- v. The manuscript based on this program is under review for publication.

**g. Pre-conceptional nutrition (women first):**

- i. Promotes optimization of health of a woman before conception.
- ii. Reduces adverse pregnancy outcomes
- iii. Improves the maternal and new-born outcomes.
- iv. Ensures healthy-baby to a healthy-mother.
  - 1 Today this **PPP has become the role model for many national and international agencies** for operational research in the community.
  - 2 This has provided forum to conduct/implement through operational research to provide evidence based quality intervention to the unreachable with objective to improve the overall health care.
  - 3 Newer simple devices were developed and being used.
  - 4 Safe delivery kits are being provided
  - 5 Blood loss measurement BRASS-V Drape was developed.
  - 6 Provision of international standard–Baby and women weighing scale, height measurement instrument to all PHC areas of this PPP.

- 7 Simple BP apparatus to measure blood pressure by ASHA's through CLIP TRIAL.
- 8 Importantly, this **PP partnership brought up changes in curricular teaching-learning methods** and improved the research culture with many publications in high impact factor journals.

**e) Problems encountered**

- i. Working with community and public sector employee was a challenge.
  - To bring the change in their attitude /aptitude
  - Proper data collection was a greatest task
  - Poor compliance from CHWs
  - Difficulty in adjusting the timings of project workers with the community members. Since the community members are not available (as they are away in the field to earn their livelihood) during the office hours.

**Solutions:**

1. Motivation by repeated training, meetings/discussions with CHWs to bring the change in their attitude / aptitude.
2. Periodic review of data after audit and field visits to verify/rectify for proper data collection
3. Identifying the persons, attempts to improve them for improved compliance from CHWs
  - a. Support from administration both, public and private sector.
  - b. Involvement of every stakeholder in the process
  - c. To involve retired public health officials
4. Community involvement without loss of wages suiting to their time. Repeated approaches made them to realize the advantages of these practices. The project workers were made to contact the community members in the evenings (as per the convenient time of the community members).

### **Notes :**

- With this PPP University was able to provide the evidence based quality health care interventions to the unreachable community.
- Improved the knowledge, skills and attitude of the health care providers.
- Created the awareness in the community.
- Community education programs were strengthened
- Successful network between peripheral (primary) health care to tertiary health care could be established.
- The objectives of NRHM and Urban Health Mission (UHM) mission were strengthened.
- Improved the research culture in the institute.
- Helped to understand community needs.
- Need based changes in curriculum, teaching and learning were made eg. HBB, NSSK.
- Quality and quantity of publication could be improved.
- Exposure to the renowned international, national researchers and agencies brought improvement in scientific presentations.
- Over all, it helped to meet the objectives of the University to improve the health profile of the community in this part of the country.
- This also provided employment opportunity to identified social workers as field staff.

### **The PPP model with RMRC, Belagavi a division of ICMR**

1. Established collaboration with University Research Foundation
2. Ethics Committee of the University is headed by the chief of the RMRC.
3. The infrastructure of both institutions including instrumentation facility, are shared for academic and scientific meets.
4. The institute hoists national meetings with ICMR/ RMRC and university faculty
5. Expertise of senior faculty is used as the member of Scientific Advisory Committee of ICMR and as Chairman of the Recruitment Committee for the appointment of senior scientists through formal MoU.
6. Exchange of faculty as resource persons.
7. The joint field visits are regularly organized in Western Ghats for survey of medicinal plants.

**PPP model is successful in following fields as well**

1. Taking over of the three primary health centers of Government of Karnataka.
2. Taking over of three urban health centers of Government of Karnataka.
3. Involvement in national blindness control programme
4. Involvement in Prevention of Parent to Child Transmission (PPTCT)
5. Establishment of Day care psychiatry center.
6. Treatment of disability induced by leprosy
7. Implementing Revised National Tuberculosis Control Program (RNTCP)
8. Initiation of school dental health check-up programme.
9. Implementing Government sponsored schemes (Yashaswini, Balsanjiveeni, Vajpayee Arogya Shree, Arogya Bhagya, etc).
10. Strengthening of research and human resource development in the field of medicinal plants in collaboration with RMRC, ICMR.

**This PPP has practically satisfied all the criteria viz. Curriculum, Teaching-Learning and Evaluation, Research, Infrastructure, Leadership above all Innovations.**

The three pillars of the University **Teaching, Learning and Research**, have reached the community and have benefitted the needy and have improved the health profile.