

Best Practices 1

1. Title :Research to Practice

2. Objective of practice

- a. To overcome a lapses in communication between researchers and practitioners
- b. To emphasize on Scientific publications of research on intervention effectiveness
- c. To deal with issues cited by public health practitioners which may be too narrowly focused, complex, difficult and costly, or may not engage or meet the perceived needs of the community.
- d. To Introduce prevention programs which must be sustained with adequate infrastructure and long-term intensity
- e. To overcome a research gap in the clinical trial results

3. The Context

The longitudinal investigation of clinical outcomes in population-based samples is a good alternative to explore in practice-based research how individual-related variables affect dental treatments. The large sample, the long period of follow-up and the involvement of a team of researchers make cohort studies expensive to maintain on long term. Normally these studies are multidisciplinary, with several research questions. This characteristic provides access to a high number of exposure variables, with high variability, which is difficult to obtain in clinical prospective or retrospective studies. Despite the wide range of individuals' data available, population-based designs present as their main limitation

the difficulty of controlling clinical data. Generally, cohort studies assess individuals but fail to present detailed variables on dental treatments because dentists are not investigated. These studies are under risk of selection bias, as dentists invariably choose the interventions according to their judgment criteria. These records were not intended for data collection and research purposes at the beginning, and therefore missing or conflicting data are always a possibility in retrospective studies. Some imprecision or contamination of data should also be taken in account, because patients could, for instance, visit other dental practice and undertake other treatments, and this may not be reported in the dental records screened for research.

4. The Practice

The approach to select interventions or strategies for treatment of oral conditions should be based on the best scientific evidence available. Systematic reviews/meta-analysis of randomized clinical trials are overall regarded as the best evidence source to determine the true response for a determined treatment, while randomized clinical trials are considered the best primary study design. Practice-based research has several advantages when compared to research conducted more “artificial” environments, such as in dental schools and other academic settings. It uses real-world patients, and real-world dental health care workers, who are subjected to all the pressures of running a busy, but financially viable practice. It also usually deals (or should deal) with clinically relevant problems for patients and clinicians, while several academic clinical studies are reporting on surrogate endpoints.

Further research based clinical practice have motivated many dental school graduates to carry forward these research and apply for many national international grants as these evidence based researches has justified and scientific based results

In India with more motivation and enthusiasm towards research bridging gap in clinical practice have focused our students towards grants by national government and state funding agencies like ICMR bodies , DST, CSIR and various other senior and junior research fellowship programmes.

Research based clinical trials recommends practice field meetings to facilitate communication between researchers, public health practitioners, policy makers, managers and other professionals from important sectors. These groups identified strategies, policies, target populations, barriers, facilitators and funding streams for implementing development programmes

5. Evidence of success

By bridging a gap between clinical practice and research various success outcomes have come around. As a institute by working on various research based projects in research lab and applying on patients directly by monitoring the invitro results of various different kind of materials and analysing its effects on patients have bring successful results in the form of increasing number of national and international publication in various good indexed journals with high impact factor. Increase number of grants by the students of college both post graduates and undergraduates by central government and various state government.

Many students are getting junior research fellowship and senior research fellowships by sending research based projects to these funding agencies.

Not only success in the form of grants but also many of our undergraduates and postgraduates are getting various awards by presenting their evidence based research projects in national and international conferences organized by renowned bodies.

Outcome of the treatment of various patients done by research based evidences is very remarkable

6. Problems encountered and Resources required

Cooperation among a diverse group of stakeholders—including research sponsors (industry, academia, government, nonprofit organizations, and patient advocates), clinical investigators, patients, payers, physicians, and regulators—is necessary in conducting a clinical trial today. Each stakeholder offers a different set of tools to support the essential components of a clinical trial. Time, money, personnel, materials (e.g., medical supplies), support systems (informatics as well as manpower), and a clear plan for completing the necessary steps in a trial are all part of the clinical research infrastructure. A number of workshop participants lamented that most clinical trials are conducted in a “one-off” manner.¹ Significant time, energy, and money are spent on bringing the disparate resources for each trial together.

Best Practices 2

Title :Efficiency through technology

Objectives of the practice

- Integrate technology to increase efficiency in patient care, education and administration.
- Use of software to efficiently streamline overall Patient Management and digital storage of patient health records in the hospital.
- Using digital media software to upgrade the typical classroom leading to better student – teacher interaction
- Use of dedicated portals to interact between the various stakeholders and solve issues transparently.
- To reduce carbon foot print

The Context

Maintenance of physical records of patients and data of various stakeholders are time consuming and cumbersome. Use of digital technology has helped tremendously in synchronizing the daily functioning of the institute in terms of patient and overall management.

The Practice

The institute has extensively employed digital technology in all aspects of functioning. We have an extensive broadband coverage (cyberoam portal) in which all faculties, students and staff has a login id and password.

Various technological aids employed are discussed below

1. Orion Software

It is extensive patient management software that is constantly upgraded and customized according to the needs of the institute. All patients have a unique Id through which they are registered. All patient records, appointments, investigations, billings, overall treatment time and referrals Patient work load of students and faculty and turnaround time can be monitored are managed. All departments maintain inventory of all items including consumption and requirements through this. All these parameters can be monitored on a daily, monthly and yearly basis to identify deficiencies and remove them.

It has improved patient care, reduced waiting times and created a repository of all diagnostic and treatment records. Requirements of consumable and non-consumable items are also uploaded through the software.

- Clinytics App:

The institute provides Teledentistry, through this application in which video appointments, accessible and affordable health care can be availed by patients. Patients can book an appointment online, consult over video through a smartphone and get a prescription online.

Teaching learning

- Video Conferencing through Logitech CC300E system and Skype, enables video and audio calls. Live surgeries and live webinars by eminent field experts can be attended by the students.
- Easy test software- Continuous assessment through Multiple choice questions are conducted in the simulation lab
- Online public access catalogue: It is deployed at the central library for quick and convenient retrieval of the books. It provides information about the number of copies available and precise location of the book.
- Library Automation Software- Alice For Windows: Circulation of books, i.e. book issue and return is managed through Alice software.
- EBSCO host: Portal with access to online journal articles accessed through specific username and password.

- ERP- records of biometric attendance and student progress is maintained. Any leave also has to be applied in the software and approval taken online
- Twak to software- A chat portal for interaction between the various stakeholders is available.
- Student Feedback Software is used to obtain feedback from the students in all aspects, so that necessary action can be taken to resolve the problem at the appropriate level.

Human resources management

- Hr one software:. Login ID is generated for each employee through which they can access their leave records, apply leave, and generate e-salary slips.
- Almighty Help Desk: All complaints regarding maintenance matters of the institution are lodged through this software. The software has a time bound escalation system for unresolved complaints which ascend up to the highest levels of management in case of complex issues.

Evidence of success

- Patient care has improved in terms of decreased waiting time, ease in access to and sharing of patient records leading to an interdisciplinary treatment approach.
- Constant upgradation of knowledge and tracking of student progress on a day to day basis.
- Streamlined transparency of all employee details in the institution.
- Access to journals and books with the online library system

Problems encountered and resources required

- Difficulty in adapting to the newer softwares due to a learning curve. Over a period of time all the stakeholders were comfortable with these changes.
- The technological advancements required a financial commitment for the implementation and maintenance.
- A dedicated IT lab operates to maintain the optimal working of the apps and server.
- Training modules are given to faculty and students for the all the software's used

