Chapter 3

RESEARCH METHODOLOGY

After stating the significance of the present study, formulating the objectives and the hypotheses, the next step is to describe the methodology followed to achieve the purpose of the study. Several methods have been applied to assess the quality of libraries including subjective and objective methods. Assessing the libraries against the requirements of standards is one of the objective methods. Meeting the requirements vis-à-vis use of standards indicates quality of the libraries. The present study was proposed to assess the quality of the libraries by comparing them with the selected requirements of the standards.

This method of research requires two important steps: (1) determining the measures available in the standards against which the libraries would be compared, and (2) collecting the primary data for comparison.

3.1 Preliminary study

Prior to determining the measures, a preliminary study was conducted to determine the libraries to be studied. The research was planned in September 2004. Initially the study was planned to include all the health sciences libraries conducting undergraduate health sciences education in Karnataka state. As a preliminary step, information regarding various undergraduate health sciences education programmes conducted in Karnataka state was collected. The information was collected from the Rajiv Gandhi University of Health Sciences (RGUHS) website as most of the health sciences institutions in Karnataka state are affiliated to the RGUHS. Once the information regarding various programmes being conducted was collected, effort was made to collect the norms of the professional regulatory bodies at the national/state level which recognize health sciences education. The norms would provide
information regarding the library facilities required to conduct educational programmes. The norms of the most of the regulatory bodies were collected from the websites of the regulatory bodies or the colleges conducting health sciences education. An examination of the norms collected from the regulatory bodies indicated considerable differences with regard to the library requirements. While the quantitative requirements of each of the councils with regard to the collections and facilities were different, many of the councils hardly provided measurable statements. Due to these deficiencies and differences existed in the requirements of the health education councils, it was finally decided to limit the present study to only the medical (allopathy) and dental colleges.

3.2 Population of the study
The study has covered only the libraries of the medical and dental colleges conducting undergraduate medical/dental education. The data was collected from the libraries in July 2007. Assessment of few measures required data of the previous years. Hence, the colleges established in 2004 or before were only considered for the purpose of the present study. The MCI and DCI websites were searched to find out the details of colleges which were established till 2004. There were 31 medical colleges and 42 dental colleges established till 2004 making a population of total 73 colleges. While 3 medical and 3 dental colleges were affiliated to private universities, the remaining colleges were affiliated to RGUHS. All the 73 colleges, i.e., 100 per cent population was covered in the study.

3.3 Selection of measures
Depending upon the objectives of a study, the assessment of the libraries can be made against the selected measures of a standards document or against the entire set of measures available in the standards document. Similarly, the assessment can be based either on the requirements of a single standards document or on the requirements of more than one standards document. The present study was planned to select measures from few selected standards documents relevant to the medical and dental college libraries.

Once the libraries to be studied were finalized, the next step in the research was to select the measures. This had to be done keeping in view the objectives and the.
hypotheses of the research At first, the following standards were examined for their appropriateness

1. 'Minimum Standard Requirements for the Medical College For 100 Admissions Annually Regulations 1999' issued by the MCI (Medical Council of India, 1999)

2. 'BDS Course Regulations – 2001' issued by the DCI (Dental Council of India, 2001)

The MCI and DCI course regulations described only ‘minimum requirements’ for a new college library. The MCI regulations included quantitative criteria for the collection, space and staff. The DCI course regulations included quantitative standards for space and staff. The measures prescribed in the MCI and DCI course regulations were very limited and inadequate for the purpose of study. Hence, it was decided to consult the service standards developed by professional library associations. There were no standards developed in India which could be utilized to assess the whole library system either in professional or non-professional colleges. The following standards and guidelines developed in other countries were consulted for selecting the measures

1. ‘Guidelines for Medical School Libraries’ (Joint Committee of the Association of American Medical Colleges and the Medical Library Association, 1965)

2. ‘Guidelines for Libraries Serving Dental Education Programs’ approved in 1992 by the Medical Library Association (MLA)


4. ‘Guidelines for Australian health libraries’ (Australian Library and Information Association, 2000)

The following guidelines were consulted

1. ‘Challenge to Action Planning and Evaluation Guidelines for Academic Health Sciences Libraries’ (Joint Task Force of the Association of Academic Health Sciences Library Directors and the Medical Library Association, 1983)

2. Guidelines on Quality Indicators in Library and Information Services Universities/Autonomous Colleges (National Assessment and Accreditation Council, 2005).
One of the problems the researcher confronted during the process of selecting the measures was the need for specific criteria applicable to the libraries of medical and dental colleges in Karnataka state. Even though the American and Australian standards/guidelines described the elements which could be used to assess libraries, specific local standards were needed to decide whether a library has met the standard or not.

During the process of finalizing the set of measures for inclusion in the present study, the RGUHS circulated its own standards (draft). The RGUHS Standards was similar to the standards developed by the professional library associations like ACRL and MLA and included many specific and nonspecific measures. Since most of the medical and dental colleges in Karnataka state are affiliated to the RGUHS, it was felt that assessing the libraries of medical and dental colleges based on the requirements of the RGUHS Standards would be appropriate.

Within few months after circulating the draft standards, finalized RGUHS Standards were circulated in April 2006 to its affiliated colleges for immediate implementation. Once this document was circulated, it was decided to focus the present study on the requirements of the RGUHS Standards. While the libraries would be compared with the specific measures provided in RGUHS Standards, other nonspecific elements included in the standards also would be examined. The RGUHS Standards were closely studied and all the important measures were selected from the same. The following common elements found in the American and Australian standards/guidelines and not found in the RGUHS Standards were also included: (1) classification scheme followed, (2) physical form of catalogue, (3) resources catalogued, (4) list of subject headings, (5) maintenance of statistics of library operations, and (6) evaluation of library through user surveys periodically.

Standards 1 and 3 (Infrastructure) in the RGUHS Standards deals with space for efficient and effective functioning. This requirement has been amplified. The requirement of rooms, basic amenities and security measures available in the libraries has been assessed based on the requirements of the Indian Standard IS 1553 1989 (Bureau of Indian Standards, 1989). The requirement of 'information centre' has been added from the 'Guidelines for libraries serving dental education programs'.
The RGUHS Standards have not defined the criteria to measure the ‘faculty status’. The conditions for ‘faculty status’ were set based on requirements of ‘Standards for faculty status for college and university librarians’ (Association of College and Research Libraries, 2001). Accordingly, the following criteria were set: (1) special leave to continuing education programmes including seminars and conferences, (2) TA/DA to attend continuing education programmes, (3) inclusion in institutional academic committees, and (4) right to vote in university’s senate election.

The quality of head of the library is not well defined in any standards clearly. Based on the literature review, the following criteria has been set to meet this element. (1) academic qualification, (2) additional qualifications, (3) participation in professional activities through joining professional associations, (4) participation in seminars, conferences, etc., (5) presentations in seminars, and (6) publications in journals.

The following measures available in the RGUHS Standards were not included for lack of specificity/relevance: (1) Standard 1 7 – learning resources, (2) Standard 3 5 – minimum computer configuration, and (3) Standard 3 6 – Internet speed.

3.4 Instruments used for data collection

Once the examination of the standards was complete and the measures to assess the libraries were finalized, the next step in the research was to collect the primary data from the libraries for comparison. Questionnaire was used as the instrument to collect the data. The questionnaire method is convenient for collecting data when the population is scattered over a large geographical area.

The questionnaire was carefully designed based on the objectives and the hypotheses of the study. A total of 68 questions were framed to collect data for comparison against the measures selected from the standards. The questions were organized in a logical and understandable way under the following eight heads: (A) Profile, (B) Information resources, (C) Access, (D) Staff, (E) Budget, (F) Services, (G) Administration, and (H) Facilities. The questionnaire is appended in appendix I.

‘Profile’ included questions that would help to categorize the libraries and also help in obtaining data for comparison. ‘Information resources’ included questions regarding the collection and collection development practices. Questions under ‘Access’ were aimed to collect data regarding the measures which helped to increase
the use of the collection owned by the institution and collections available from outside resources. Questions under 'Staff' were included to collect data regarding the availability of various categories of the staff, quality of professional staff, their benefits and rights. Questions under 'Budget' were framed to know the money spent by the libraries and practices which would help to maintain consistency in spending. Questions under 'Services' were framed to find out the range of services provided by the libraries. 'Administration' covered other important questions relating to library administration. 'Facilities' included questions regarding the building, space, furniture and equipment and other facilities provided by the library.

Most of the questions were structured. The form of questions were closed or limited to stated alternatives. Such questions are easy to handle, simple to answer, quick and relatively inexpensive to analyse and are most amenable to statistical analysis. Due attention was given to the sequence of the questions. The questions were coded to facilitate analysis.

3.5 Pilot study

Once the questionnaire was ready, a pilot study was conducted. Pilot study is essential to test the effectiveness of the questionnaire in collecting relevant data. Seven medical colleges and 7 dental colleges were included in the pilot study. All the questionnaires were returned within a short time. Two dental colleges returned the questionnaire without providing any data. The colleges informed that they shared the library facilities with the medical colleges. It necessitated the researcher to make some changes in the 'profile' part of the questionnaire. An informal enquiry was made to find out the number of colleges having common facilities. It was found that four medical colleges and four dental colleges had common library facilities. Hence, there were 69 libraries supporting 73 colleges. The inputs and suggestions received from 12 libraries which returned the questionnaires helped the researcher to make necessary changes.

3.6 Period of data collection

The finalized questionnaires were mailed in July 2007 to all the libraries, 15 months after the RGUHS standards were circulated for 'immediate implementation'. A total of 69 questionnaires were sent covering all the 73 colleges including 27 medical college libraries, 38 dental college libraries and 4 common libraries. The libraries were
requested through a covering letter to return the questionnaires before end of October 2007. The libraries were also assured that the data they provided would be kept confidential. It was necessary as few libraries had expressed their concern regarding providing all the details.

A separate letter was sent to the Dean/Principal of all the institutions covered in the study to obtain their permission to collect the data. It was required since the researcher anticipated heads of institutions refusing to provide data on the pretext of 'maintaining secrecy'.

Two months after the questionnaire was sent, only 8 completed questionnaires were received. It necessitated the researcher to follow up through letters, emails and phone calls. One of the problems the researcher faced was persuading the librarians to complete and return the questionnaire. Often the researcher was told that the libraries had either already mailed the completed questionnaires or they did not receive the questionnaire at all. The researcher visited sixteen colleges and collected the data personally. It helped to increase the response rate.

Omissions were found in many of the received questionnaires and were corrected through follow-up with the heads of the libraries. Necessary data were obtained through email or over the phone. The question regarding the written policies (Question 49) required the libraries to send a copy of the developed policies. Many libraries claimed that they had written policies for certain practices. Such libraries were requested to mail a copy of the available policies. Most of the libraries did not respond to this request.

3.7 Analysis of the data
Altogether 60 questionnaires were returned providing a response rate of 87 per cent. The details regarding libraries responded are provided in analysis chapter. The data collected were entered using Microsoft Excel worksheet. The answers were coded. Coding was felt necessary for efficient analysis. The data were classified as per the requirements of the study. The libraries were grouped into three viz., medical college libraries, dental college libraries and common or composite libraries. The data were further analysed using SPSS software. Tabulation shows the performance of the libraries to each measure selected. Performance of individual libraries against 48 specific measures (Annexure III) prescribed in the RGUHS Standards is presented at 69.
the end of the analysis chapter Based on the findings of the study, the hypotheses have been accepted or rejected

3.8 Conclusion
The analysis of the data, testing of the hypotheses and reporting of the findings etc are provided in the forthcoming chapters