A higher educational institution is a subdivision of the university system entrusted with the responsibility of disseminating the knowledge. The library is established to collect, house and store the information resources that serve the educational programmes conducted by the institution. The library plays the role of a central learning resource and it plays this role through the following activities: (1) it collects and stores the information which serves institution's purpose, (2) it organizes and controls the information so as to retrieve easily, (3) it provides access to the information as and when required by the users, (4) it educates and trains the users to access the available information, and (5) it evaluates and updates the information periodically to maintain relevance.

The role a library plays in an educational institution is closely related to the objectives of the institution. The objective of a non-professional educational institution is to provide the students basic knowledge in disciplines of their interest, create reading habits, help them to improve intellect, and develop good personality. The library contributes to the institutional objectives through developing collection that includes basic books on various disciplines, literature that would create reading interest in students and help them to improve their knowledge about different aspects of life.

The professional colleges are aimed to train students for career in a particular profession. The teaching and training are fully focused and revolve around improving the skills of the students relating to a particular profession and prepare the students to handle issues likely to be confronted in professional career. The professional colleges
require updated literature on all subjects relating to the profession. A teacher or a student in a professional college can neither think of managing with few basic books on the profession nor can afford to acquire all the updated literature required in the teaching-learning process. The library as educational resource plays vital role in the professional colleges by acquiring and updating regularly the information resources required by the students and the faculty. The quality of teaching, learning, and research activities in professional colleges are largely influenced by the library service.

1.1 Role of medical and dental college libraries

The medical and dental colleges are professional institutions. They are established with the following common objectives: (1) conduct medical/dental education and training to the students, (2) provide health care service to the public, and (3) support and conduct research on topics relating to human health. In order to achieve their objectives, the medical and dental colleges require a variety of information on health sciences and other related subjects. The medical and dental colleges have established libraries to meet the informational requirements of both educational and health care programmes conducted.

Traditionally the libraries of the medical and dental colleges played the role as information providers through collecting and storing the available information and retrieve the required information as and when the same was needed. They developed techniques that helped easy search and retrieval of relevant information. The role of the libraries supporting the medical and dental colleges has evolved consistently over the period of time. This is primarily due to two factors: (1) exponential growth of literature in health sciences, and (2) packaging and delivery of information in various formats including e-resources. In the context of these developments, the libraries of medical and dental colleges have been identified with the following roles: (1) role as information collection centre, (2) role as information access facilitator, (3) role for information updating, and (4) role as educator.

The user communities in the medical and dental colleges need different kinds of information. While the undergraduate students require information resources that provide basic knowledge regarding the medical or dental education, the health care providers require the latest updates on the diagnostic and therapeutic knowledge. The postgraduate students and research scholars have different requirements. Libraries
need to play the role of information providers to all these groups. They need to identify the requirements and develop own collections that would meet most of the users’ requirements.

The medical and dental sciences fields require authentic, updated and exhaustive literature. The growth of literature in health sciences has made the task of selecting authentic materials a very difficult task. It requires library staff to use proper evaluative methods during the selection of information resources so that every piece of information acquired is useful.

With the growth of literature in health sciences and the delivery of information in different formats, no medical or dental college library can afford to be self-sufficient in terms of information resources. It requires the libraries of medical and dental colleges to play the role of facilitators of information from outside sources. Facilitating information from outside sources includes access to the resources of other libraries through agreements, networks and consortium, and access to free and commercial online resources.

The techniques and technologies used in diagnostics, therapeutics and rehabilitation have witnessed great progress as a result of increased research in medical and dental sciences across the world. Application of the latest clinical and research knowledge is essential for a health care professional to transfer the benefits of the latest knowledge to the patients and thus to remain relevant in the profession. The libraries have an important role to play in ensuring access of the latest clinical and research knowledge by the health care professionals. They play this role by acquiring and providing access to the recently published materials and subscribing to the current journals.

Health sciences information is accessible in different formats. It demands the users to be trained in the search and access of information available in different formats. It requires the library to play the role of an educator. Providing education and training on search and access of information available in various formats allows the users to do self-search and use the information in their training, practice and research. Such search knowledge increases the possibility of student communities updating their professional knowledge even after completing their training.
1.2 Need for quality of medical and dental college libraries

An academic library supplements teaching. Hence, its quality is as vital as the quality of teaching staff. The library has become fundamental infrastructural facility in the medical and dental colleges. The success of the academic and health care programmes conducted by these colleges does not depend only on the skills of the clinicians and hospital equipment, success equally depends on the information services available. A library which does not have quality in terms of adequacy of collections and other resources cannot appropriately support the academic and health care programmes in medical and dental colleges.

1.3 Factors contributing to quality

There are many factors which contribute to the quality of library service. Satisfactory service provision demands a library to plan its services based on the principles which govern the profession. A library cannot provide quality service till it has the required books and other reading materials on its shelves. A library functions to maximize access to the information resources and maximize exposure of library users to the information resources. Fundamental to all these functions however, is the information resources, whether owned by the institution or accessible from external sources. Good services cannot be expected from a library that is poorly resourced, not organized and not served by service-oriented staff. The primary requisites of good library service may be summarized as follows: (1) planning of library operations and services based on assessment of requirements, (2) deployment of a competent team of professionals to plan, administer and provide library services, (3) consistent allocation of funds adequate to acquire required information resources and maintain services, (4) provision of a functional building in appropriate location, infrastructure and latest technologies, (5) development of comprehensive, updated and adequate information resources based on academic programmes and user requirements, (6) organization of information resources, (7) development of access tools, (8) user education and promotion of library services, (9) development of written policies to guide library operations, (10) evaluation and updating of library services.

1.4 Improvement of quality in libraries

Ever since their transformation from places of preservation of knowledge to knowledge dissemination centers, the libraries have innovated many methods to
improve quality. They have used both subjective and objective methods to assess the quality. The assessment is aimed at identifying the deficiencies that existed either in the collections and resources or in the processes. The identification of the deficiencies has helped to rectify the same.

1.5 Measures of assessment

Libraries have devised different measures to assess and improve library quality. While many libraries have used quality assessment measures once a while for self-assessment, many libraries have adopted them as part of management methods. The focus of areas of library assessment has changed over the period of time in the developed countries. Traditionally, the resources or 'inputs' were the main focus of assessment, as they represented quality of libraries. Gradually, the focus shifted from input to 'output.' However, 1990s witnessed a shift from measuring 'output' to measuring 'outcomes.' This was because the libraries too like the profit sector adopted 'customer-oriented approach' to determine quality. Several measures have been identified to evaluate individual areas in a library including collections, services, staff, and library processes. The useful approaches used to assess the whole library include the use of standards, benchmarking, statistical compilations, and collections of 'best practices' or model documents (American Library Association, 2003).

1.6 Library standards

1.6.1 Meaning and definition

South African Library Association has defined library standards as "the criteria by which library services may be measured and assessed. They are determined by professional librarians in order to attain and maintain the objectives they have set themselves. Standards may be interpreted variously as the pattern of an ideal, a model procedure, a measure for appraisal, a stimulus for future development and improvement and as an instrument to assist decision and action not only by librarians themselves but by laymen concerned indirectly with the institution, planning and administration of library services" (South African Library Association, as cited in Hirsch, 1972, p. 159). The American Library Association (ALA) Policy Manual has defined library standards as, "policies which describe shared values and principles of performance for a library." According to it, standards documents:

1. Tend to be comprehensive, covering a broad scope of programs and services provided by a library.
2. May define both qualitative and quantitative criteria
3. Present goals towards which the profession aspires
4. May include statements expressed in relative terms, that is, by relating library performance to norms derived from a reference population
5. Set criteria for the decisions and actions of those concerned with the planning, administering and accrediting of library services

Library standards are a set of statements or criteria developed for the purpose of measuring various elements of library services. They include quantitative and qualitative criteria. 'Quantitative criteria' are the measures expressed in numerals. 'Qualitative criteria' are descriptive statements derived from a philosophical point of view. Library standards are developed by a team of professional experts and include criteria developed by mutual consensus among those who develop them and those who use them.

Standards for library services are developed by various agencies. Each has its own purpose in developing them. The agencies developing library standards include (1) professional library associations at international, national, regional and at lower levels, (2) accreditation bodies, and (3) government bodies and committees. Library standards are developed independently by any of the agencies or in collaboration of one agency with another.

All standards used by the libraries cannot be called library standards. Some standards have historical and incidental relationships to libraries, like standards of measures and weights, product standards, work performance standards, and information and communication technology standards.

Libraries have been using different types of standards and guidelines developed by the profession. The standards have been developed for information products, resources, services and practices. The ALA Standards Manual (American Library Association 2003) has categorized standards and guidelines into four groups: (1) service or performance standards and guidelines, (2) procedural standards and guidelines, (3) educational standards and guidelines, and (4) technical standards and guidelines. While the first three standards are used in library operations, educational standards are used for accrediting academic programmes in librarianship. Generally, the term ‘library standards’ is used for ‘services or performance standards’ aplicable
to libraries The terms ‘standards’ and ‘library standards’ as used hereafter in present study represent ‘service or performance standards’

1.6.2 Library standards and guidelines
A ‘guideline’ is a statement of advice The ‘guidelines’ for library services are a set of statements of advice relating to library services They include detailed checklist of library services a library might provide Guidelines reflect the prevailing or accepted practices in typical libraries They provide the administration of an institution some rationale that could be utilized early in the development of a new institution The ALA Policy Manual states that guidelines “consist of procedures that will prove useful in meeting the standards” Guidelines documents:

- Are program- or service-specific and not necessarily comprehensive
- Define qualitative criteria, generally exclude quantitative criteria
- Identify factors contributing to program effectiveness
- Provide a framework for developing service policies and procedures
- Incorporate benchmarks by which a particular library and information service, resource, or material may be judged.

The purpose of developing standards is to provide a ‘tool of measurement’ A library can compare itself to the standards and decide to what extent it has met them The purpose of developing guidelines is ‘to direct’ libraries towards improved services Guidelines are more of a planning document than a measuring tool Perhaps the difference between guidelines and standards is ‘what could be and should be’ (Henne, 1972, p 242)

1.6.3 Official standards and library standards
Library standards are not official standards Official standards are approved by a national or international agency authorized to approve official standards Standards of weights, measurement and products meet the definition of standards they are set up by a government authority, tested and proved by a government agency to measure weight, extent, quantity or quality Official standards affect libraries equally with all other agencies which need measurements Library standards are developed by library associations and the scope of application is limited to the population specified in the document of library standards
1.6.4 Need and purpose of developing library standards

Standards provide direction for development of the libraries Institutional administrators need clear guidelines to plan and spend on library services Similarly, the librarians though professionally trained, seek similar directions regarding resources, services and practices to decide the appropriateness of the services provided by them It needs a framework which can be used by librarians and the administrators for their respective purposes The library standards are management tools that can be used to plan library services and subsequently evaluate them

Library standards serve many purposes One purpose common to them is the reflection of goals whereby institutions provide good quality libraries They provide impetus in the establishment, development, and improvement of libraries They furnish criteria that can be used in connection with procedures for evaluation, certification and accreditation Library standards deal with levels of resources, services, procedures for planning, describe good practices including statistical basis for the application of standards Wallace (1972, p 50) has stated that library standards serve to meet the following definite needs

a) the need for a preliminary goal for a new or developing institutions or a new or developing service which is minimal in its requirement but which must be met for accreditation or other types of recognition (which may be designed as minimal standards)

b) the need for the statement of accepted guidelines or normative practices beyond any minimum level to provide a method of comparison with leading institution and for self evaluation (diagnostic standards)

c) the need for long range goals for development which may be met by any library Now, but which we will challenge even first rank institutions and which will set the direction for professional development in the ensuing years (projective standards)

d) the need to meet the requirement of individual librarians for statement dealing with qualification, working condition, professional responsibility and other personal practices as distinguished from institutional needs (personnel standards)
1.6.5 Use of library standards

In spite of the fact that the library standards have never been legally mandated, and thus enforceable, they have served as a means of evaluation of libraries for many decades. They have helped to great extent to improve the resources and facilities in the libraries. Two historical standards developed for library evaluation by the ALA - 'Standards for College Libraries' (1959) and 'Standards for Junior College Libraries' (1960) were able to bring phenomenal changes in the college and junior college libraries within a decade they were issued. Libraries used them to evaluate existing services. Government agencies used them as a means for determination of excellence, and often for special funding, as well as for the development of their own sets of standards. Accrediting agencies used them to update their standards. They triggered the development of library standards in and outside the USA. Experts have felt that the use of standards can provide optimal solutions to library problems as they have proved useful in manufacturing and industrial sectors. The utility of library standards is evident from the continuing efforts in many countries to develop standards or adopt standards developed elsewhere for improving the services.

1.6.6 Types of standards for library services

Henne (1972, p 234) while discussing the standards for media programmes in schools has categorized library standards based on their treatment in presentation and coverage as under:

- by function (qualitative, quantitative, or a combination thereof),
- by area (services, personnel, resources, expenditures or facilities),
- by scope (national, regional, state, district, etc.),
- by source or authorship (national, regional, or state professional associations, regional education associations, state offices, etc.),
- by authority (endorsements of national, regional, or state associations, requirements of accrediting agencies, state actions-laws, regulations, codes, adoptions, endorsements, or recommendations, or local stipulations),
- by level (phases, quality levels, or range of achievement goals),
- by terminology used, which may or may not reflect variations in philosophy (standards, guidelines, or criteria) or in scope (media centre, school library, or other term),
• by treatment (issued separately or incorporated with standards covering all parts), and
• by some combination of the categories that have been listed

The word 'standard' is given many meanings including 'something established by authority, custom, or general consent as a model or example' and 'something set up and established by authority as a rule for the measure of a quantity, weight, extent, value, or quality'. In the light of the above definition of the word 'standard' and based on the purpose behind their development, library standards may be categorized as

• library standard as a model to be followed
• library standard as a rule established by authority

1.6.7 Library standards as models
Standards developed by the library associations are models which are framed to advise libraries and hence are also known as 'advisory standards'. They do not have any legal standing. The purpose of a model is to provide the libraries guidelines based on custom, research, or general consent for the development of the individual library resources and services by comparing the same with the model. Their practical value is to provide internal and external stimuli and to incite progress towards the goal presented.

1.6.8 Library standards as rules
The purpose of the rules is to measure the quantity or quality of the library resources and services to ensure strict adherence by the libraries. Such standards are issued by governments and their agencies. The agencies developing such standards need legal, moral, or professional right to establish the rule and also has the strength and means to enforce the standards, demanding compliance and enforcing penalties for noncompliance. Government policies for library provision, requirements of regulatory bodies, etc. are considered as rules. Models can become rules when they are adopted by the governments for strict implementation.

1.6.9 Elements of library standards
The 'elements' are the aspects of library services which are included in the library standards. The library standards include those elements which the profession considers as important to improve the quality of library. They tend to change as the perception of the library profession changes as regards library quality. Criteria are
formulas to measure elements Elements in library standards reflect the purpose of designing standards. They can be broadly categorized into three groups: (1) inputs, (2) outputs, and (3) outcomes.

1.6.9.1 Inputs
Inputs are generally regarded as the raw materials of a library program - the money, space, collection, equipment, and staff, out of which a program can arise (Association of College and Research Libraries, 2004). They represent resources. Historically, 'size' of the collection was a problem and so was the manpower, facilities, and budget. Traditional library standards included criteria to measure these elements. Library standards till 1970s primarily included elements to measure inputs. Input standards are continued to be recognized as quite effective to plan and develop basic collection, other resources, and facilities in libraries. There is consensus in the profession regarding elements to measure input and to some extent even in the numerical criteria.

1.6.9.2 Outputs
Outputs are the products and services performed by a library. Output measures aim to assess the effectiveness of the library performance. Outputs serve to quantify the work done, i.e., number of books circulated, number of reference questions answered (Association of College and Research Libraries, 2004). They are related to the achievement of libraries. They are more user-oriented and more to do with management practices. Output measures are closely tied to the library's defined goals and objectives, because as measures of effectiveness they evaluate how well the library is accomplishing what it sets out to do. Due to increased interest and accountability in 1970s, it became apparent that input measures by themselves were no longer an appropriate means for evaluating library programs. Measuring library performance based on output was considered to be appropriate. Such perception was followed by deciding the output measures that could gauge library performance.

Though criteria for library outputs have been designed and revised in the last forty years, there have been only quality statements specifying the criteria to measure outputs. This approach, however, does not yet have indicators of what excellent service might require. The approach is of a single library assessing its services in relation to its own goals and objectives (Lynch 1997, p 127).
1.6.9.3 Outcomes
Outcomes are the ways in which library users change as a result of their contact with the library's resources and programs (Association of College and Research Libraries, 2004). Outcomes measurement has become a new way to measure the quality of libraries in developed countries. They measure effects of the library output on the environment. It is extremely difficult if not outright impossible to measure the effect of the library services on the user or the effect on the quality and quantity of research (Boekhorst 1995, p. 280, Davies 2002, p. 131).

Input measures were sidelined in the 1970s and replaced by measures to assess output. Soon the profession realized that until inputs, which is the pre-condition of an adequate service was upgraded, there was no point in measuring the outputs. Shortfalls in outputs signal the need to upgrade the appropriate input standards. Though output and outcomes assessment has become a major area of assessment in libraries in the developed world, inputs remain as important elements of library standards.

1.6.9.4 Other elements
There are other two important aspects which continue to form part of library standards without much change over a period – the process, and library administration. Processes are represented by activities with which the library changes inputs into work results – outputs. The administration is represented by the structure and the activities that impact the growth of the library and providing effective services to library users.

New elements are being included in new standards with libraries providing more services. Issues of the quality of libraries and how to measure that quality have been complicated by the expansion of new services made possible by the new information technologies. Access to external resources has become an important element in the modern standards after the emergence of Internet. Electronic journals and databases have become popular in the last few years. Ease of access, space problems have been reasons for the popularity of electronic journals. The availability of computers, Internet connectivity, Internet speed, availability of computer printers, scanners, trained manpower have become important elements in the recent standards.
1.6.10 Essentials of library standards

The library standards are developed as an evaluation tool. They set criteria against which library services are compared and measured. They are often criticized for not serving the purpose for which they are designed due to lack of the essentials. To be used as an effective tool, library standards require certain qualities relating to the criteria and other aspects.

1.6.10.1 Criteria

Randall (as cited in Wallace, 1972) has identified four desired qualities related to criteria in library standards. They are (1) measurability, (2) clear definition, (3) appropriateness, and (4) authoritativeness. If the standards are to be useful, they must be able to measure the things to be standardized against them. One must be able to say whether the thing in question has met the standard or not. There should be no need to justify the requirement of criteria capable of measurement. Standards must provide a basis for evaluative judgement. Good standards include both quantitative and qualitative criteria as basis. If the basis is expressed in quantitative terms, the measurement is easy. If the basis is a descriptive statement, it should be amplified in a manner that allows it to be compared with the element for which it is created. Another quality is that the criteria in a standard are clearly defined and definable. In addition to providing basis for measurement, a statement also should be clearly defined beyond ambiguity. It conveys same meaning to all those who use the standard. It should not be a subject of argument. The third quality is that the criteria must be appropriate. Library standards are developed for different purposes. The criteria set should be appropriate to that purpose. Each case requires different criteria appropriate to the institution or service to be evaluated. Finally, the criteria must be authoritative. They must represent customary or generally accepted practices in librarianship. They should be based on research solidly conceived and executed. Lynch (1997, p 125) has commented that “The committee of the ACRL charged with the revision of the ‘Standards for College Libraries’ in the 1970s gathered and analysed statistical data to develop the 1975 standards. These were the useful data and standards, while revised several times since 1975, have not changed much. This suggests that standards, based on factual data and solid analysis can be useful.” Personal prejudices and preferences, assumptions and pressures, incidents and experiments, should not determine the criteria.
1.6.10.2 Presentation and language
The library standards are used by the library professionals and others who are related with library services. It is important that library standards are written in a language and in a style that all can use them easily. They ought to be written in lucid and forceful prose.

1.6.10.3 Co-operation
Library standards directly affect stakeholders, viz., the library staff, managements, and the users. It is essential to understand the requirements of each party, take them into confidence during the standard development process. While discussing the involvement of various stakeholders of library services in the development of standards for public libraries, Martin (1972, p. 176) felt that "citizens in general, political leaders and government officials, and the most prescient of sociologists and social theoreticians should join in the endeavor with the librarians." Hirsch (1975, p. 46) has stated that similar involvement is desirable during the development of library standards for all levels of education from elementary school to university.

1.6.10.4 Revision
The standards demand review when the elements and the criteria they include are no more relevant at the time of their use. Continued changes in social conditions, educational trends, and technological developments often render library standards ineffective. Consequently, revising the standard to include new elements becomes important. There is no specific time frame for the revision. However, there is general opinion expressed in literature by the experts that a standard should be revised at least once a decade or as and when the circumstances demand.

1.6.11 Development and use of library standards in different countries
The review of literature on development of library standards gives an impression that standards have been developed and used quite extensively in few developed countries with USA in the lead.

1.6.11.1 Library standards in the USA
The movement towards library standards has been increasingly successful in the USA. The library profession has played the main role in developing library standards. The government and the regional accrediting agencies have played secondary role.
early works to develop standards by the library profession in USA was an effort to provide guidance to librarians regarding the resources required to provide minimum services. Accreditation activities in academic institutions and other service areas in 1960s and 1970s contributed to the proliferation of advisory library standards. They were developed to provide libraries a self-evaluation tool and prepare them well for accreditation exercises.

Standards and guidelines have been developed in the USA at national, regional, state, and local levels for all types of libraries. The ALA has led other associations in the development of library standards and guidelines. The first attempt by a national organization of librarians in the USA to create some standards was the authorization in 1917 by the ALA to take up the question of standardization of libraries and librarians (Lancaster 1977, p. 291). In that year a formal report on school library standards was presented and adopted at a Symposium of the North Central Association of Colleges and Secondary Schools. The ALA develops standards and guidelines through its divisions which are constituted based on the type of library and type of activity. At present there are eleven divisions. ALA has developed standards and guidelines for different types of libraries—school libraries, libraries in institutions of higher education, public libraries, and special libraries. It has also developed standards and guidelines for different areas of libraries—services to special category of users, acquisitions, collection management and development, audiovisual materials, personnel issues, education for library service, planning, preservation, rare books, manuscripts, and archives. MLA has taken the lead to design standards for library services in health care settings and academic health sciences institutions. ALA and MLA have influenced the profession within and outside the USA to develop standards and use them. Special Library Association (SLA) has developed library standards for use by its members.

The Association of College and Research Libraries (ACRL), and American Association of School Librarians (AASL), two divisions of ALA have contributed immensely for the overall development of libraries in schools and higher education institutions across the USA. In 1959 ACRL developed ‘Standards for College Libraries’. This landmark document developed for evaluation purposes was prepared by the ACRL Committee under the chairmanship of Felix E. Hirsch. Within a decade after the standards were issued, they transformed the college libraries in the USA.
They formed the basis for the allocation of grants to college libraries under the Higher Education Act. The standards attracted the attention outside the USA and evoked interest in the profession to design similar models to meet local needs. They have been revised in 1975, 1986, 1995, and 2000.

In 1960, the committee that developed Standards for College Libraries formulated 'Standards for Junior Colleges'. The committee included prominent librarians from junior colleges. Like the college library standards, this document too had great impact on the libraries in junior colleges in the USA. The conditions of junior colleges in terms of resources and infrastructure were improved considerably after the approval and publication of the standards. The standards were revised in 1979, 1990, and 1994.

Efforts were made around 1960 by an ACRL Committee on Standards to establish standards for university libraries. After the prominent university librarians expressed their opinion regarding problems in developing such standards, efforts were given up. Discussions regarding establishing standards were once again started in 1967 at the ALA midwinter meeting. A Joint Committee of ARL and ACRL on University Library Standards was set up. It was agreed to develop a set of criteria for excellence of university library services instead of preparing statements of ideal standards. First document in the form of a report with a set of minimum criteria for judging excellence in university libraries was made in 1969 by the Joint Committee. The report, however, was not formally adopted by ARL or ACRL. A formal document 'Standards for University Libraries' was adopted in 1978 by the ARL and in 1979 by the ACRL. In 1989, a revised edition 'Standards for Libraries Evaluation of Performance' was issued.

In 1998, on the recommendations of the Task Force on Academic Library Outcomes Assessment, the ACRL mandated that all its future standards incorporate outcomes assessment. The 'College Library Standards' developed in the year 2000 was the first to incorporate outcomes assessment measures. It was considered to be a model to other two standards - Standards for University Libraries and the Standards for Two-year College Libraries. Representatives from the standards committees of the college library standards (CLS), community and junior college library standards (CJCLS) and university library standards (ULS) sections met and eventually recommended that the 2000 edition of the college library standards be adopted as a single...
comprehensive standard to be used by all academic and technical libraries. A task force was set up in 2002 for the purpose. The task force produced a draft statement and was circulated for comments. After thorough public hearings and public comments, the final draft was approved by the ACRL standards and Accreditation Committee and the ACRL Board in June 2004, and the three existing standards were rescinded. The new standards were entitled ‘Standards for Libraries in Higher Education’.

ALA standards for school libraries were developed by the American Association of School Librarians (AASL), a division in the ALA. Standards for School Libraries were established as early as in 1917. They were adopted by the Secondary School Department in 1918 after minor revisions. ALA endorsed them in 1920. In 1925, ‘Elementary School Library Standards’ were developed by a joint National Education Association (NEA) and ALA committee. These standards defined aims, scope, and use, as well as scope and sequence of instructions for starting and maintaining a library. A sub-committee of the ALA Committee on Post-War Planning prepared ‘School Libraries for Today and Tomorrow: Functions and Standards’ (1945). AASL developed and published standards in 1960, 1969, 1975, 1988, and 1998. They were endorsed by a variety of professional and educational associations. The new set of guidelines for school media programmes are expected to be published in 2008.

Library standards to measure public libraries have been promulgated by the ALA since 1933. The first state library standards were issued by ALA in 1963. Efforts towards creating standards for special libraries were made in the early 1960s by a committee of the Special Library Association (SLA). In 1964, SLA issued an article that included qualitative statements for objectives, staff, collection, services, physical facilities, and budget. The standards were considered equally valid for libraries in all settings like banks, newspapers, government agencies.

MLA has issued standards for health sciences libraries. The Hospital Libraries Section Standards Committee of the MLA prepared ‘Standards for Hospital Libraries 2002.’ The standards were developed as a guide for hospital administrators, librarians to meet the requirements of the Joint Commission on Accreditation Hospitals (JCOAH) and to ensure hospitals have the resources and services to effectively meet their needs for knowledge-based information (Standards for Hospital Libraries 2002). The standards were revised in 2005 with few changes. While approving the original...
and revised version of the standards, the MLA Board of Directors recommended to
the Standards Committee of the Hospital Libraries Section (HLS) to continually
evaluate and revise the standards as necessary to reflect changes in the health care
environment and MLA. In March 2005, the National Network of Libraries of
Medicine (NN/LM) Hospital Internet Access Task Force issued a final report and
made several recommendations, one of which was to work with HLS Standards
Committee to add a ‘technology standard’ during the future revision. This aspect was
considered in the ‘Standards for Hospital Libraries 2007’ (Medical Library
resources are available to support the library’s mission of providing KBI resources
and services.”

In May 1992, the Standards Committee of the Dental Section of the MLA
prepared two documents – ‘Guidelines for Libraries Serving Dental Education
Programs’ and ‘Guidelines for Libraries Serving Dental Hygiene Education
Programs’. The guidelines were designed to assist the librarians and their institutions
in completing the Commission of Dental Accreditation (CDA) self-study report. Both
the guidelines contain similar statements. The statements are grouped into nine
sections. In 1995 the ‘Standards for Chiropractic College Libraries’ were approved by
the MLA Board of Directors. The standards were compiled by the Chiropractic
College Libraries Standards Committee of the MLA assisted by the Standards
Committee of MLA’s Section Council. The document was aimed to provide a sound
basis for evaluating chiropractic college libraries for present and future progress. The
standards have been designed to adapt to the needs of each chiropractic college and to
be compatible with other library guidelines.

Standards have been developed for vision science libraries by the Association
of Vision Science Librarians (AVSL) that included librarians of ophthalmology and
optometry libraries throughout the world. The first document of standards was
compiled in 1976 which included both standards and guidelines. It specifically
addressed libraries serving optometric institutions. The revised edition published in
1986 did not include guidelines. The standards were broadened to include health care
as well as academic institutions. The third edition was approved by the AVSL in
December 1998. It included standards for technology.
One of the milestones which is less mentioned in literature is the ‘Guidelines for Medical School Libraries’ developed in 1965. It was prepared by a Joint Committee of the Association of American Medical Colleges (AAMC) and the Medical Library Association (MLA). It is still considered to be a most appropriate and comprehensive document that included 166 statements. Two years later, in 1967 the National Library of Medicine (NLM) invited the Association of American Medical Colleges to define the function of the medical library in education for the health profession. The Executive Council of the Association of American Medical Colleges signed a contract with the NLM for the study in January 1966. In 1967 the study committee finalized its report ‘The Health Science Library Its Role in Education for the Health Professions.’ The document addressed the issues health sciences librarians encounter and aimed to guide them towards solutions. In 1983, the AAHSL Committee on the Development of Standards and Guidelines recommended that the 1965 Guidelines should be replaced by a completely new document. Accordingly, the Association of Academic Health Sciences Library Directors (AAHSLD) and the MLA appointed a joint task force to develop guidelines for academic health sciences libraries. The joint task force was charged with preparing guidelines for the operation of academic health sciences libraries in the changed new environment. The task force soon determined that updating the 1965 Guidelines was no longer appropriate. In 1984 the document ‘Challenge to Action Planning and Evaluation Guidelines for Academic Health Sciences Libraries’ was published. The new document provided a framework for strategic planning and self-evaluation that served to inform institutional administrators of the key role that the library can and should play in the academic health sciences institutions. It included the issues that would challenge librarians in the changed technology driven environment and provided guidelines for actions that libraries and their institutions must take to meet the challenges. It addressed issues beyond those traditional concerns covered in the 1965 Guidelines (Joint Task Force of the Association of Academic Health Sciences Library Directors and the Medical Library Association, 1987, p iv).

In addition to the efforts of professional library associations like ALA, MLA, and SLA to develop library standards and guidelines, American Correctional Association, American Prison Association, American College of Surgeons, American Medical Association, American Psychiatric Association, American Hospital
Association, National League of Nursing (NLN), Joint Commission on Accreditation of Healthcare Organizations (JCAHO), Commission on Accreditation of Rehabilitation Facilities and many regional medical programs have contributed to the development of libraries in their respective areas by including statements in regard to library provision in their standards or guidelines or statements of requirements.

1.6.11.2 Library standards in other developed countries

The example of the USA in developing library standards has had a strong impact on Canada. The standards movement gained momentum there, however, only in the 1950s (Hirsch 1975, p. 58). In 1955 the Canadian Library Association (CLA) issued 'Suggested Standards of Service for Public Libraries.' In 1967 CLA issued 'Public Library Standards' and issued an appendix in 1969 to its standards that included quantitative standards for print and non-print materials. In 1961 recommendations were made to use the American 'Standards for College Libraries' and that the Canadian Library Association (CLA) design its own standards for academic libraries. In 1964 the Canadian Association of College and University Libraries (CACUL) made a number of proposals that included an allocation of 10 per cent of institutional operating budgets for established libraries, initial book fund of $500,000 and a related amount for salaries during the first 4 years of library operations of a new college.

'Guide to Canadian University Library Standards' was prepared by the CACUL in 1965. The development of the guide witnessed a decade of unprecedented growth in the Canadian academic libraries. The guidelines were influenced by American standards. In 1970 the CACUL set up a committee to formulate standards for Canadian community colleges. The standards document entitled 'Standards Recommended for Community College Libraries' was adopted by the CLA in 1972. In 1973 the CACUL published standards for college libraries that included both qualitative and quantitative standards. Both the Guidelines (1965) and Standards (1973) provided standards for common elements included in American standards. In 1974 a statement 'Normes des Bibliotheques des CEGEP' was published by the Federation des CEGEP, Commission de Coordonateurs de Bibliotheques.

In 1965 'Preliminary Standards for School Libraries' was formulated. The final document entitled 'Standards of Library Service for Canadian Schools' was published in 1967. It provided an outline for basic requirements for good services in the school libraries in Canada. The Standards included both qualitative and
quantitative statements In 1969 ‘Media Canada’ was published by the Educational Media Association of Canada. In 1977 a book ‘Resource Services for Canadian Schools’ edited by F R Branscombe and H E Newsom and jointly sponsored by the Association for Media and Technology in Education in Canada and the Canadian School Library Association was published. In 1981 the Canadian School Library Association produced ‘A Recommended Curriculum for Education for School Librarianship’ dealing with diplomas in school librarianship.

The Canadian Library Association, the Canadian Regional Group of the Medical Library Association, the Ontario Medical Association, the Canadian Medical Association, and the Association of Canadian Medical Colleges developed a set of standards for Canadian hospital libraries in 1974 (Stinson 1982, p 127, Scossa & Henderson 1982, p 148). The standards were similar to the standards MLA recommended to JCAH in 1974. In 1975 the Alberta Government Libraries’ Council (AGLC) published ‘Standards and Specifications for Alberta Government Special Libraries’ which could be used by a wide range of special libraries within the government of Alberta.

Libraries, in all sectors in the UK have progressed very well with the efforts with the collaborative efforts of the government and the library profession. The Library Association (LA) and other groups have issued standards for libraries of universities, polytechnics, and colleges running various academic programmes. The standards provide both prescriptive and descriptive statements with an aim to encourage authorities to improve library services in the immediate future. A report by the Parry Committee published in 1967 that compared the British Universities with the universities of other countries. It quoted Standing Conference of National and University Libraries (SCONUL) model annual budget. In 1968 LA specified resources required by the libraries of polytechnics. The standards have not been reviewed.

The University Grants Commission (UGC) has issued standards for university library services in UK. However, it is the heterogeneous nature of universities, like in the USA, that has frustrated the attempts of developing standards for university libraries. The only standard about university libraries much quoted in 1970 was the statement in the Parry Report of 1967 that mandated a minimum of six per cent of university income to be spent on its library. In 1980, SCONUL concluded that the
Conference should not declare a policy on the norm since circumstances greatly varied in member universities. LA has issued standards for college libraries. In 1981 LA approved a comprehensive set of new guidelines for college libraries that included suggested levels of resources. The guidelines were benchmarked against good college libraries. The emphasis was less on quantitative standards and more on the quality of the services that libraries could offer.

The School Library Association issued standards for the library services in primary schools in 1966. In 1972 it published 'Libraries in Secondary Schools' In 1980 it issued standards that listed duties of the person responsible for the school library. The LA issued 'School Library Resource Centres Recommended Standards for Policy and Provision' in 1970 'A supplement on Non-book Materials' was issued in 1972. The statement clarifies that book and non-book materials complement and support each other, and that they should be regarded as part of a unified collection. In 1977 LA revised its statement that recommended resources according to size of the school.

In 1943 Library Association published a document for reorganization and development of public libraries. A 'working party' set by the Ministry of Education in 1961 issued 'Standards of Public Library Service in United Kingdom (UK) and Wales' in 1962. A new set of statements were issued in 1969. In 1971 a group of public librarians issued a short statement entitled 'Public Library Aims and Objectives'. In 1976 a body called the Local Authorities Management Services and Computer Committee (LAMSAC) commissioned to investigate the number of staff needed to perform a variety of typical library tasks came out with its report. Although the work was not intended to be a standard, it was frequently cited by the LA in their standards and guidelines. In 1981 Library Association developed 'Guidelines for Reference and Information Services to Public Libraries in UK and Wales,' an update of a document issued in 1969. In 1965 standards for hospital libraries were issued by LA. Revised standards were issued in 1972 and 1978. In 1970 another set of standards 'Library Services in Hospitals' was issued by the British government.

The LA in 1965 issued recommended standards for library services in colleges of technology and other establishments of further education. The standards were revised in 1971 under a new title 'College Libraries Recommended Standards of Library Provision in College of Technology and Other Establishments of Further Education.'
Education. The Association of Teachers in Colleges of Education and Department of Education and Library Association jointly published in 1967 'College of Education Libraries. Recommended Standards for their Development.' In 1981 LA issued standards for prison libraries. The Art Libraries Society (ARLIS) published a set of standards for the provision of art materials in public, academic, special, and national libraries. The British and Irish Association of Law Librarians (BIALL) established its own standards for British and Isles in 1981. The standards were intended to cover all types of law libraries ranging from those in universities to those existed in small law firms.

Much literature is not available regarding the development of library standards in Germany. Qureshi (1980, p. 477) has reported the progress made in that country. A number of library standards have been published in Germany. Both quantitative and qualitative standards have been prescribed. The elements for which prescriptions have been made are similar to USA and European countries. Even though the standards varied from the ones developed by the ALA, they have contributed for the growth of different libraries. The Ministry of Higher and Technical Education has taken a lead role in association, in particular, with the Methodologic Center for Academic and Research Libraries and the Working Group for Libraries in Higher Schools. Both mandatory and advisory standards have been developed. In its second report in 1964, a council set up by the government to formulate overall plan for the promotion of scholarship and research and to indicate priorities, stressed the need of promoting academic libraries. The recommendations of the report were considered to be most significant and comprehensive about university libraries in Germany. The report which was quite influenced by the Parry Report (UK) was though not primarily concerned with library standards became the basis for future standards. The report was considered to be quite significant and comprehensive and identified the areas to be focused in a new library. It provided quantitative standards for library collection, budget for both existing and new university libraries. It also provided two model budgets, one for university libraries and the other for technical university libraries. Similar recommendations for selected areas were made by a working group for the Baden-Württemberg Libraries, and a planning group in North Rhine-Westphalia that was established to recommend requirements for the establishment of libraries for five new universities.
In Japan standards were developed for minimum services in the university libraries in 1952 which was prepared by the Library Research Committee of the University Library Standards Association. In 1953 another document 'Principles for Library Improvement' was developed. Standards for different kinds of libraries have been issued and adopted by the managements to improve library services in Japan.

Even though information on standards for library services in academic and academic health sciences institutions are not available, the development of standards for school libraries, special libraries and public libraries have been reported from France, Sweden, Norway, Poland, Netherlands, Hungary, USSR, New Zealand, Australia, Singapore, Malaysia, and South Africa.

1.6.11.3 Library standards in the developing countries

The library standards are continued to be framed in the developed countries. While they have helped the libraries to evaluate the available facilities they have helped institutional administrators to understand requirements of library services.

Development of standards by one body has encouraged similar bodies to frame their own norms. The standards have influenced the governments, helped them while allocating funds to libraries and develop library policies. They have influenced the accrediting associations to improve their assessment criteria for libraries.

The importance of standard as a dynamic instrument for the development of libraries however is not recognized in the developing countries. The standards are necessary in the developing countries to improve the resources and services of libraries in these countries. However, the efforts to develop library standards are not significant in the developing countries.

Evaluation exercise has been a part of library administration in the developed countries. However its importance is not recognized in the developing countries. The library services in the developing countries have not grown as compared to the libraries in the developed countries. The library is still not considered to be a contributing factor to the betterment of the society in developing countries. The mindset is not much different even with regard to academic libraries including academic health sciences libraries. The functioning of a well-equipped library has not yet come to be considered vital to an academic institute. Its contribution to achieving the goals of the parent institution is not recognized. There are three recognized
reasons which hinder the growth of academic libraries in the developing countries. Firstly, library services in the academic set ups including in the institutions of higher education are often provided as a ‘formality,’ as one of the several conditions for recognition requirements, secondly, the environment and those fund library services still do not demand (or expect) from the libraries any proof of effective functioning, and thirdly, the librarians have no knowledge of the methods and techniques for measuring performance and they do not see any sense in introducing such techniques into their library’s operations.

There have not been significant efforts by the library associations to formulate standards in the developing countries. The governments have played the main role in developing standards for library services by formulating committees to study library services and developing its own policies. Library professionals have suggested standards based on knowledge and individual experience. The profession has not yet thought of development of advisory standards. The development of library standards was triggered in the developed countries by the requirements of accrediting associations. Since accreditation has not been made mandatory in academic and service sectors in the developing countries, the necessity of self-assessment and quality improvement has been a voluntary exercise.

1.6.11.4 Indian scenario

The government and educational regulatory bodies have played significant role in developing standards for library service in India. The University Education Commission (1949) under the Chairmanship of Dr. S. Radhakrishnan recommended criteria for allocation of grants to the libraries. The UGC library committee headed by Dr. Ranganathan in 1965 recommended quantitative standards for books, budget, staff and space in university and college libraries. Since then several committees on education and library services involving librarians and educationists have recommended standards for various elements. Educational bodies responsible for different types of academic programmes have developed ‘minimum requirements’ for the programmes they recognize. The regulatory bodies including the University Grants Commission (UGC), All India Council for Technical Education (AICTE), Medical Council of India (MCI), Dental Council of India (DCI) and other bodies responsible to recognize academic programmes in India have included standards for library services in their respective programme requirements. The National Assessment
and Accreditation Council (NAAC), an autonomous body established by the UGC has developed standards for library services in institutes of higher education (National Assessment and Accreditation Council 2005) Unlike the minimum standards of recognizing bodies which include generally resources, NAAC standards are comprehensive and seek to evaluate the library output, and library practices.

In 2006, the Working Group on Libraries set up by the National Knowledge Commission (NKC) recommended a set of standards covering all aspects of library services that aimed to modernize the collection, services and facilities in all libraries (National Knowledge Commission 2006) One of the important recommendations the NKC made in December 2006 to the Prime Minister of India was to set up a National Mission on Library and Information Services (NMLIS) to play defined role that included setting standards for collection services, and technical processing.

Efforts to develop standards by the library professionals in India have been primarily restricted to designing technical standards. Soon after the establishment of the Bureau of Indian Standards (erstwhile Indian Standards Institution) in 1947 standards were framed for library and documentation work Standards were also framed for primary elements in the design of library buildings, library furniture, library lighting, book binding etc The library profession in India has played the secondary role in developing service standards It has relied on the standards developed by the government bodies The contribution by the librarians towards developing standards has been to collectively or individually making recommendations to the government about the areas which needed standards.

No standards to assess over all library performance have been issued by the library professionals so far in India at the national level However, an effort in this direction was made by the Indian Library Association (ILA) in 1989 The thirty-fifth annual conference of the ILA had selected ‘standardization in library and information work and services’ as a topic for its annual seminar. The seminar was intended to provide basis for the development of standards in library and information work and services (Vashishth, 1989, p xii) The Central Sectional Committees of the ILA responsible for development of standards in their respective sections were invited However, no standards were developed as an outcome of the seminar.
Earlier in 1978, a set of standards were developed by the Haryana Library Association for use by the libraries supporting undergraduate and postgraduate education in the colleges affiliated to Kurukshetra University, and MD University, Rohtak. The standards were similar to standards developed by the ACRL for library services in the USA.

A significant effort in the direction of setting standards for health sciences libraries was made in 1983 by the Medical Library Association of India (MLAI) in a three day national workshop organized in collaboration with the National Medical Library (NML) and the Medical Council of India (MCI). The workshop came out with a set of recommendations for use by the health sciences libraries including the hospitals. Recommendations were made for minimum services, collection, physical facilities, manpower, budget and resource sharing (Medical Library Association of India 1983). The MCI incorporated selected recommendations in its ‘minimum requirements’ to start a medical college. The recommendations were, however, not publicized for use by health sciences libraries. In its golden jubilee conference held in Bangalore in 2005, the MLAI had planned to revise its recommendations. The efforts failed due to lack of consensus among the participants. Another significant effort was made in the year 2005 by the Rajiv Gandhi University of Health Sciences (RGUHS) in Karnataka in collaboration with library professionals working in the colleges affiliated to RGUHS. It resulted in the development of standards for health sciences libraries affiliated to RGUHS.

1.6.11.5 RGUHS standards for health sciences libraries
Recognizing the existing poor conditions of health sciences libraries in the affiliated colleges and the role of libraries in upgrading the standards of health sciences education, the RGUHS decided to upgrade the quality of the libraries. It was decided to develop a framework that would guide the affiliated colleges regarding provision of library services. As a preliminary step towards formulating the standards, a survey of the libraries of RGUHS affiliated colleges was conducted by the university to collect information regarding the existing library facilities. After analysis of the data collected through the study, a team of experts prepared a set of draft standards. The standards included both qualitative and numerical statements. The draft standards were circulated among the librarians of the affiliated colleges for their opinion. In October 2005, the RGUHS invited the librarians of the affiliated colleges to
participate in a one day workshop with the purpose to finalize the standards. After incorporating the suggestions offered by the professionals during the workshop, a final document was prepared by the team which had earlier prepared the draft standards. The finalized set of standards was sent to the RGUHS Syndicate for its approval. The Syndicate in its meeting held on 10th January, 2006 approved the ‘Standards for Libraries in Health Science Institutions affiliated to Rajiv Gandhi University of Health Sciences, Karnataka’, and resolved the ordinance for immediate implementation of the same by the affiliated colleges. The RGUHS through a notification issued on 03.04.2006 directed the principals of the affiliated colleges that “all the colleges affiliated to RGUHS shall make necessary arrangements to implement the Library Standards on resources, services, infrastructure, budget and manpower in their Libraries” (Rajiv Gandhi University of Health Sciences 2006).

1.7 Significance of the study
Karnataka state has the maximum number of medical and dental colleges in India. While there were 221 medical colleges in the country in 2004 spread across 27 states, Karnataka alone had 31 (14.03%), second highest in the country after Maharashtra state. During the same period, there were 42 dental colleges in Karnataka, the highest (20.39%) among all the states in India. Even though medical and dental colleges in Karnataka have been increasing, there have been no comprehensive studies conducted in the recent past either at the state level or national level to assess the quality of libraries of these colleges. Few studies have been conducted in Karnataka recently on the quality of medical and dental college libraries. However, they are insignificant as regards the geographical coverage and depth of the study. No comprehensive studies based on the requirements of standards have been conducted in Karnataka state so far. It makes present study significant.

1.8 Scope of the study
The study selected the libraries of the medical and dental colleges in Karnataka state. The medical colleges include only those imparting education in allopathic system of medicine. The study has excluded colleges offering education in other systems of medicine like ayurveda, homeopathy, unani and siddha. Institutions providing undergraduate medical/dental education are included. The institutions providing only postgraduate programmes in medicine/dentistry have not been included in the study. In case the medical and dental colleges do not have separate libraries and share
common facilities with other colleges, such libraries also have been included in present study.

1.9 Objectives of the study

The following objectives have been framed for the study

1. To examine the library services and facilities available in the medical and dental colleges
2. To examine the standards available to assess the libraries
3. To assess the quality of the libraries supporting the medical and dental colleges in Karnataka by comparing them with the requirements of library standards
4. To assess the libraries against the specific requirements of RGUHS Standards
5. To examine the differences between the medical and dental colleges in meeting the standards
6. To examine the difference between government and private college libraries in meeting the standards

1.10 Hypotheses

Based on the objectives, the following hypotheses have been formulated

1. More than half of the libraries do not meet even 50 per cent of the specific measures prescribed in the RGUHS Standards
2. Medical college libraries perform better than the dental college libraries in meeting the RGUHS Standards
3. The private college libraries meet the standards more than the government college libraries
4. The operations of libraries supporting the medical and dental colleges are not based on written policies