

Accreditation of Pharmacy Institutions: Background and the New Norms

S. B. Bhise*

Principal, Sinhgad Institute of Pharmaceutical Sciences, S.No. 309/310, Off Mumbai-Pune Expressway, Kusgaon (Bk.), Lonavala – 410401 Pune (MS) India.

ABSTRACT

Submitted: 15/03/2013

Accepted: 28/03/2013

Present article outlines the background regarding process of accreditation of various institutes in India. Importance of National Accreditation and Assessment Council (NAAC) and National Board of Accreditation (NBA) in the process of quality assurance of education is highlighted. For the purpose of globalization, norms of NBA were revised to make them consistent with contents of Washington Accord (WA). This article mainly focuses on the revised norms of NBA accreditation for Pharmacy institutions as published in January 2013. The nine criteria identified by NBA in this revised document are briefly presented. Concepts like Program Educational Objectives (PEOs), Programme Outcomes (POs), Course Outcomes (COs), and Mapping will be new to the readers to figure out in the latest document of NBA.

Keywords: Pharmacy Education, National Board of Accreditation, Revised Norms, Objectives, Outcomes.

BACKGROUND

We all are well familiar with the word “Quality Assurance” in the context of drugs. Assurance of quality in the manufacture of drugs involves monitoring of quality of raw material and the process of formulation at every step so that the final product is of predefined quality. When the same concept is applied to the process of pharmacy education, the efforts related to “Quality Assurance of Pharmacy Education” are reflected in the process of accreditation. Quality assurance in Pharmacy education essentially means monitoring availability of 'Right' students and monitoring the process of effective teaching, learning practice in such a way that the trained graduate is useful to the needs of community as well as pharmaceutical industries. On international platform, few accrediting agencies specially designed for pharmacy education have been established e.g. in USA, Accreditation Council for Pharmacy Education (ACPE) has provided standards and guidelines for pharmacy institutions desiring accreditation by ACPE. In years to come, accreditation is going to be mandatory for all institutions; hence knowing background about what accreditation is necessary.

Two national bodies are mainly involved in accreditation of institutes in India

1. National Accreditation and Assessment Council (NAAC) and
2. National Board of Accreditation (NBA)

NAAC was established by University Grants Commission

(UGC) as an autonomous body and NBA was established under the umbrella of All India Council for Technical Education (AICTE) both in 1994. While purview of NAAC was quality assurance of education under university and colleges imparting higher education in areas other than technical education, the mandate of NBA was limited to diploma, degree and post-graduate institutions in Engineering, Technology, Pharmacy, Management, Architecture and related disciplines. Once a part of AICTE, NBA became autonomous on 7th January 2010.

NBA looks forward to be an accrediting agency of international repute by ensuring the highest degree of credibility in assurance of quality and relevance of professional education and fulfill the expectations of its stakeholders viz. academicians, corporate, educational institutions, government, industry, regulators, students and their parents.

NBA aims to achieve this by stimulating the quality of teaching, self evaluation, and accountability in the higher education system, which help institutions realize their academic objectives and adopt teaching practices that enables them to produce high-quality professionals and to assess and accredit the programs offered by the colleges or the institutions, or both, imparting technical and professional education.

THE REVISION OF NORMS

NBA format and criteria for accreditation have been revised multiple times internally since January 2009 and the latest accepted criteria are prescribed in January 2013. One question may come up in reader's mind “What is the reason for revising the norms for accreditation?” The answer lies in the process of globalization. Along with globalization of Indian economy, the education sector is also getting

*Address for Correspondence:

S. B. Bhise, Principal, Sinhgad Institute of Pharmaceutical Sciences, S.No. 309/310, Off Mumbai-Pune Expressway, Kusgaon (Bk.), Lonavala – 410401 Pune (MS) India.

E-mail: satishbhise@gmail.com, sbbhise.sips@sinhgad.edu

globalized. To achieve uniformity in education, under the banner of International Engineering Alliance, three accords have been signed, The Washington Accord in 1989, The Sydney Accord in 2001 and The Dublin Accord in 2002. India has decided to get aligned with “Washington Accord (WA)”. WA is an international agreement among the engineering quality assurance organizations of several countries. The signatories of the accord recognize that graduate accredited programs in any of the signatory countries be recognized by other countries having made the academic requirements for entry to the practice of engineering. The accord enables the signatory to have comparable criteria, policies and procedures for accrediting engineering programs. In India, degree pharmacy education comes under the purview of All India Council for Technical Education (AICTE). Before attaining the autonomous status, NBA was a subsidiary body of AICTE. Thus being under purview of AICTE, Pharmacy education in India obviously became party to NBA and the process of accreditation. As per WA, a country becomes eligible for full fledged membership after two years of provisional membership if all other members unanimously agree for the same. The NBA became a provisional member of the WA, on 20th June 2007. In 2008, India approached WA for full membership, but this bid to be a full member of WA was not acceded in 2009. However India's provisional membership was extended as a special case. This evoked the revision of accreditation format of NBA and thus accreditation format has been internally modified several times recently. In March 2012, World Summit on Accreditation was held in New Delhi and Pharmacy Council of India (PCI) was an active participant for the same. This summit was organized by NBA. Subsequently NBA criteria for accreditation were revised, latest being January 2013 version. Being a full-fledged member of WA ensures that undergraduate degree of a member country would be accorded an equal status in all other member countries. This is the reason why accreditation standards have been thoroughly revised.

Accreditation is a process of quality assurance and improvement, whereby a programme in an institution is critically appraised to verify that the institution or the programme continues to meet and exceed the norms and standards prescribed by the appropriate designated authorities. In India, NBA is conferred to be the appropriate designated authority. Accreditation does not seek to replace the system of award of degree and diplomas by the universities/ autonomous institutions. Thus accreditation is additional or complementary to the existing system of affiliation to the respective university. Accreditation provides assurance that the academic aims and objectives of the institution are honestly pursued, are effectively achieved by the resources available, and the institution has demonstrated

capabilities of ensuring effectiveness of the educational programmes over the validity period of accreditation. Thus, NBA accreditation is a quality assurance scheme for higher technical education in India.

CURRENT FORMAT OF NBA

The revised NBA standards work on two-tier system: Tier I and Tier II. While Tier I document is for autonomous institutions and university departments, Tier II document is for non autonomous institutions affiliated to universities. Spread of Pharmacy education in India is very limited in university departments or autonomous institutes while more than 95% of it is under the umbrella of non autonomous affiliated colleges; hence they are supposed to follow Tier II documents. However, there is no harm for any non autonomous institutions to apply for Tier I document, if they feel that they are capable of following the criteria applicable to Tier I system.

Significance of accreditation and accreditation policy has been well described in Accreditation Manual for Pharmacy UG programmes by NBA. Briefly, significance of accreditation lies in following parameters:

1. Identifying weakness of the programme and suggestions for improvement.
2. Continuous improvement of quality of the programme.
3. To facilitate institutions for updating the programme curriculum, teaching-learning process, faculty improvement and students' improvement.
4. To excel among stakeholders.
5. To attain international recognition.
6. To facilitate the mobility of graduated students and professionals.

Salient features of accreditation policy are as follows:

1. Programmes, instead of educational institutions, are accredited at present.
2. Programmes which have trained graduates for at least two academic years will be considered for full accreditation.
3. The institution desiring accreditation has to make a written request to NBA for accreditation and has to abide by the NBA's accreditation manual, rules and regulations.
4. The programme may be granted accreditation for a maximum period of 5 years.
5. Programmes will be assessed and evaluated in accordance with the accreditation criteria. Accreditation is based on satisfying the minimum standards.
6. The educational institution, desiring NBA status shall bear the cost of accreditation.

There are 9 criteria for evaluation of the programme. Tier I and Tier II marking systems differ only in few criteria. New accreditation format and process of NBA is based on objectives. This being distinct feature of current format, certain new terms have been introduced in the process. Reader should be aware of following three terms.

a. Assessment - Assessment is one or more processes, carried out by the institutions that identify, collect and prepare data to evaluate the achievement of the PEOs and Pos.

b. Evaluation – Evaluation is one of more process, done by the evaluation team for interpreting the data and evidence accumulated through assessment objectives. Evaluation determines the extent to which PEOs or POs are being achieved, and results in decisions and actions to improve the programme.

c. Mapping – Mapping is the process of representing, preferably in a matrix form, the correlation among the parameters. It may be done for one to many, many to one and many to many parameters.

Few important points of these 9 criteria of the new accreditation process are discussed as follows.

1. Vision, Mission and Programme Educational Objectives (PEOs)–

Vision is a futuristic statement that the institution would like to achieve over a long period of time and mission is the means by which it proposes to move towards the stated vision. Thus vision is a long-term goal and mission indicates short-term goals through which the institution can achieve the vision. e.g. If vision is established as “Life-long learning” then mission may be indicated as “Continuous professional education through short-term courses”.

Programme Educational Objectives (PEOs) are broad statements that describe the career and professional accomplishments that the programme is preparing graduates to achieve.

e.g. “Practicing cGMPs” can be of the PEO for B.Pharm. programme.

- PEOs being new concept in the current accreditation process. Following points should be considered regarding PEOs -
- PEOs should be assessable and realistic within the context of the committed resources.
- A comprehensive list of various stake-holders of the programme involved in the process of defining and re-defining PEOs should be provided.

Following factors should be considered while designing PEOs-

1. The PEOs should be consistent with the mission of the Institute.
2. All stake holders should participate in the process of framing the PEOs.
3. The number of PEOs should be manageable.
4. PEOs should be based on the need of the stake-holders
5. PEOs should be achievable by the programme
6. PEOs should be specific to the programme and not too broad.
7. PEOs should not be too narrow and similar to the POs.
 - PEOs should be reviewed periodically based on the feedback of the programme's various stake-holders.
 - It is expected to indicate how the administrative system helps the programme in ensuring the attainment of the PEOs. Necessary documentation should be maintained.

2. Programme Outcomes (POs) -

Programme Outcomes (POs) are narrower statements that describe what students are expected to know and be able to do upon the graduation. These lead to the skills, knowledge, and behavior that students acquire in their programme.

e.g. “Knowing regulatory aspects of cGMP” can be one of the programme objectives of B.Pharm. programme.

Graduates attributes (GAs) are a set of individually assessable outcomes that are the components indicative of the Graduate's potential to acquire competence to practice at the appropriate level. Following are the GAs identified by the NBA for a UG Pharmacy programme -

1. Pharmacy knowledge
2. Thinking abilities
3. Planning abilities
4. Leadership skills
5. Professional identity
6. The Pharmacist and society
7. Environment and sustainability
8. Ethics
9. Communications
10. Modern tool usage
11. Lifelong learning

The POs formulated for B. Pharm. must be consistent with the NBA's GAs of the UG Pharmacy programme. The POs must be linked to the attainment of the POs. The attainment of POs may be assessed by direct and indirect methods. In case of indirect assessment, “Rubric” is a new term used in the

documents. A Rubric expresses the expectations for students' performance. It is a set of criteria for assessing students' work / performance. It is particularly suited to such POs which are complex or not easily quantifiable. Such POs may not have clear right or wrong answers, or which are not evaluated with the standardized tests or survey, e.g. Assessment of "critical thinking" will require Rubrics to be developed.

The results of assessment of each PO should be indicated. It is important in continuous improvement of the programme. There should be a process of revising and redefining POs based on the needs of the stake-holders.

3. Programme Curriculum -

Conventionally in the curriculum, titles of the subjects, sub-components involved along-with weightage in the form of marks or number of hours are indicated. Course objectives may not be clearly defined. While defining the curriculum for the purpose of accreditation, following points should be specially considered -

- The relevance of curriculum components including core pharmacy courses to the POs shall be given.
- It should be indicated how the core pharmacy subjects in curriculum lend the learning experience with the problem solving related to actual life.
- If the curriculum is not able to achieve POs / COs, then the gaps should be identified and additional training to be provided to bridge the gap.
- Required information for assessment, evaluation and review methods to evaluate attainment of COs be indicated.

Course Outcomes (COs) are narrower statements that describe what students are expected to know, and be able to at the end of each course. These lead to skills, knowledge and behavior that students acquire in their programme.

e.g. "How to prepare tablets" can be one of the course objectives in the course entitled "Pharmaceutics".

4. Student's Performance in the Programme-

Students admitted to the programme should be capable of achieving the POs. the policies and procedure for admission should be transparent. Academic performance of the students be monitored carefully. The Institute should provide support services like counseling and should have a mechanism to redress problems of the students. Information about admission intake, success rate, academic performance, placement be provided for three complete academic years.

5. Faculty Contributions-

Adequate number of qualified faculty should be available. The faculty must be actively involved in research and development (R&D). The faculty must have academic

freedom. They should be engaged in continuous improvement of PEOs and POs. following information about the faculty for three complete academic years be provided -

- Student – Teacher Ratio (STR)
- Faculty – Cadre Ratio (FCR)
- Faculty Qualifications (FQ)
- Faculty Retention (FR)
- Faculty Research Publications (FRP)
- Faculty Intellectual Property Rights (FIPR)
- Funded R&D Projects and Consultancy (FRDC)
- Faculty interaction with outside world
- Faculty competence co-relation with programme specific criteria
- Faculty as participants / resource persons in training and development activities

6. Facilities and technical support

The details of infrastructural facilities including classrooms, seminar halls, conference halls, faculty rooms, laboratories, animal house, museum, medicinal plant garden needs to be provided under this heading. Details about instruments, equipments and their relevance to curriculum and POs should be indicated.

7. Teaching-learning process

It includes details about modes of teaching such as lecture, tutorial, seminar, group discussions and details about practical skills in laboratories. In addition, information about students' admission, tutorial / remedial classes / mentoring, teaching and evaluation process, feedback system, self learning, career guidance, training and placement, entrepreneurship cell, co-curricular and extracurricular activities be provided.

8. Governance, institutional support and financial resources

The program must possess financial resources to fulfill its mission and POs. Details about budgetary planning and its execution should be indicated. Structure of the organization, governance and transparency, public accounting for institution as well as program be indicated.

9. Continuous improvement

There should be documented process for the periodic review, the PEOs, the POs and the COs. The continuous improvement in the PEOs and POs need to be validated with proper documentation. Improvement in all the important parameters mentioned in eight criteria indicated earlier have to be provided under this heading.

AWARDING ACCREDITATION.

Under tier II system, a program scoring minimum 750 points out of 1000 with a minimum score of 60% in mandatory fields (criteria 1, 4, 5, 6, 7, 8) shall be eligible for accreditation of 5 years. Whereas a program with a score of 600 points and 60% in mandatory fields (criteria 1, 4, 5, 6, 7, 8) shall be eligible for accreditation for two years.

Steps involved in accreditation process.

Following 6 steps are involved

Step 1: Online registration process (for institution not registered with NBA)

Step 2: Applying for accreditation

Step 3: On site visit of evaluation team to the institute

Step 4: Consideration of evaluation report by Evaluation Accreditation Committee (EAC)

Step 5: Issuance of accreditation status

Step 6: appeal (if any) against the accreditation status

Provisional accreditation to new programs for a year of two years may be offered.

Before accreditation visit, the evaluation committee gives a list of documents which the accrediting institute should keep ready. During the visit of accreditation, the evaluation committee examines all the documents to ensure that the program deserves the accreditation. In order to have transparency and objectivity, in the evaluation process, the chairperson, evaluators, head of the institution may give one's feedback about others to the NBA using specified forms.

There is a redressal process for award of accreditation. After decision of the award, the institution can make an appeal within thirty days along-with supporting evidence. The GC / Subcommittee of GC / NBA will consider the findings of the

appellate committee and arrive at a final decision within 60 days after the appeal. If appellate committee directs for revisit, the NBA will appoint a reevaluation team after consent from the institution and a second visit may be conducted after receipt of the requisite payment from the institution. If the institution does not agree for revisit, the appeal shall be considered as deemed to be dismissed.

Members of the evaluation team are provided with a document, "Guidelines and operating practices for accreditation visit and evaluation".

After discussion of background and the New Norms of Accreditation in the present article, the readers might have got overview of the revised NBA document. Guidelines and operating practices for accreditation visit and evaluation as well as Self Assessment Report (SAR) for Pharmacy programmes will be discussed in the subsequent articles.

ACKNOWLEDGEMENTS

Authors are thankful to Dr S. R. Naik (Professor and Head, Department of Pharmacology) and Dr. K. S. Jain (Professor and Head, Department of Pharmaceutical Chemistry) from Sinhgad Institute of Pharmaceutical Sciences, Lonavala for their critical comments and discussion.

FURTHER READING

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