External Peer Team Review Report for Performance under Autonomous status of Bombay College of Pharmacy

Academic year: 1st July 2020 - 30th June 2021

Date of Online Review meeting: August 20, 2021

Name of Institute: Bombay College of Pharmacy

Committee for Peer Team Review

S. No.	Name of Expert	Details		
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Year of Establishment of Institute: 1957

Type of Institute: Government Aided Institute

Name of the affiliating University: University of Mumbai

Objectives of Peer Team Review:

A. To review the performance of Bombay College of Pharmacy under Autonomous status in 2020-2021

I. General Information

- A. The statutory, non-statutory and college committees ensured proper management of academic, financial, and general administrative affairs in 2020-2021 by conducting online meetings (due to COVID pandemic and lockdown situation)
- B. Received Extension of Approval from AICTE for the academic year 2021-2022 and PCI approval up to 2023-2024.
 - AICTE F.No: Western/1-9321106183/2021/EOA, dated 25/06/2021 Pharmacy Council of India (PCI) decision for continuation of EOA up to 2023-2024 was made in the 112th Central Council meeting held on 10.06.2020.
- C. IQAC, BoS, Academic Council, Finance Committee and Governing body meetings are conducted as per the regulations of UGC and the proceedings are documented as minutes of meeting. The reports are uploaded on the website regularly.

II. Programs information

A. Programs:

S. No.	Level (UG / PG/ Ph.D.)	Name of the Program with Specialization	Sanctioned Strength of students	Actual Strength of students enrolled
1	UG	Bachelor of Pharmacy (B.Pharm) Aided	60	60 + 3 (EWS)
2.	UG	Bachelor of Pharmacy (B.Pharm) Unaided (Introduced in 2020-21)	40	40 + 3 (EWS)
3.	PG	Master of Pharmacy (M.Pharm)	54	51
		a. Pharmaceutics	15	15+1 (EWS)
		b. Pharmaceutical Chemistry	10	10
		c. Pharmacology	10	10+1 (EWS)
		d. Pharmacognosy	04	00
		e. Pharmaceutical Analysis	15	14
4.	Ph.D (Tech)	Pharmaceutics		
				02
		Pharmaceutical Chemistry	35	04
		Pharmacology	(17 vacant seats)	01
		Pharmacognosy		00

EWS - Economically Weaker Section

B. Syllabus:

- a. 1st year B. Pharm: As prepared in 2019-2020
- b. 2nd year B. Pharm: As prescribed by Pharmacy Council of India (PCI) with modification within the framework of PCI syllabus and approved by BoS (UG) and subsequently in academic council for the benefit of students with respect to employability / entrepreneurship / skill development

- c. 3rd and 4th year B. Pharm: As recommended by Academic Council of Bombay College of Pharmacy which is in line with University of Mumbai Choice based credit system (CBCS) syllabus
- d. M. Pharm: As recommended by Academic Council of Bombay College of Pharmacy which is in line with University of Mumbai Choice based credit system (CBCS) syllabus
- e. Ph.D. (Tech): As prescribed by University of Mumbai
- C. Revision of Syllabus: The modifications in the curriculum are suggested by the departmental faculty, industry experts, stakeholders, and alumni. The proposed curriculum is then presented to the Board of Studies (UG and PG) followed by the Academic Council. Recommendations of the Academic Council are accepted by the Governing body.
- D. Curriculum: The institute has a coherent and versatile plan for curriculum delivery which focuses on critical and creative thinking, ethical behavior and developing proficient pharmacy professionals.
 - a. Conduct of regular Tutorials, Quiz and Practice exams
 - b. Conduct of extra lectures for better and deeper understanding of contents
 - c. Use of Smart classroom and online tools (e.g. Microsoft Teams, Forms, Videos) for effective content delivery
- E. Students' Feedback on Curriculum and Teaching Learning-Evaluation Processes: The students' feedback is collected for all courses taught by faculty at the end of each semester. The feedback for the year 2020-2021 was generated through the AICTE 360-degree feedback portal.
- F. Timetable and Academic Calendar: The Timetable for all the programs is prepared by the academic committee with inputs from all departments before the beginning of each semester and is adhered to meticulously. The Academic Calendar is prepared jointly by the academic committee and the examination committee. The curricular and extracurricular activities in the year 2020-2021 were planned considering the academic calendar.
- G. Certificate Course: 01
 - a. 'Data Analytics in HealthCare' jointly by Navigo Analytix and Bombay College of Pharmacy in association with Indian Pharmaceutical Association, Maharashtra State Branch (96 hours & 8 credits course across 3 months)
 - b. First batch started in September 2020. Currently, admission for 6th batch is in process

III. Admission

- A. The admission for all programs is conducted on Merit basis at Bombay College of Pharmacy.
- B. Admission to UG and PG course is conducted by Directorate of Technical Education (DTE)

- C. All the details related to admissions including eligibility criteria, fee structure, guidelines, notices, required documents and merit lists are displayed on College notice board and Website.
- D. Any vacancy after DTE rounds is filled in the Institutional rounds on the basis of DTE merit rank.

IV. Faculty

- A. Number of full-time permanent faculty: 17
- B. Number of contractual / Adhoc faculty: 16
- C. Number of visiting faculty: 19
- D. Faculty: Student ratio: 1:12 (Total Student Strength = 402, UG 298 + PG 104)
- E. Professional development:
 - a. Attending National and International conferences, seminars and workshops
 - b. Attending and organizing Faculty Development Programs (FDP)
 - c. Memberships of Professional bodies
 - d. Collaborations with Industry and academia
 - e. Organization of guest lectures at the institute
- F. Continuing education:
 - Attending Online Courses/MOOCs / Swayam / AICTE Internshala courses/NITTTR/ Coursera
 - b. Pursuing higher studies e.g., registration for M. Pharm, MS, Ph.D.

V. Institutional Facilities

- A. Classroom with Smartboard facility and well-equipped laboratories for undergraduate and postgraduate training and research, Renovation of three Pharmaceutics laboratories
- B. Equipment and Instruments: The infrastructure is continuously upgraded in the college and four new instruments are purchased in this academic year.
 - a. Gel Permeation Chromatography (GPC) under AICTE MODROB grant: Rs. 20,00,000
 - b. Anesthesia System under AICTE MODROB: Rs. 2,93,068
 - c. Photodiode array Detector under AICTE-RPS grant: Rs.5,85,000
 - d. Rolling Ball Viscometer under AICTE-RPS grant: Rs.14,01,749

Western Regional Instrumentation Centre (WRIC) helps for repair and maintenance of the instruments and equipment under Annual Maintenance Contract (AMC)

- C. Library resources: 8079 Titles, 11609 Volumes, 37 National and International published Journals, Subscriptions of 7104 DELNET and INFLIBNET journals, 23 Bentham e-journals (AICTE e-ShodhSindhu subscription), Scopus indexed journals (AICTE e-ShodhSindhu subscription)
- D. Computer center: Yes
- E. Information Communication Technology (ICT) tools:
 - a. Number of Computer systems connected by LAN: 70
 - b. Number of systems connected by WAN: 25

- c. Major software packages available: Legal system software, Legal Application software, Windows 10, Microsoft Office 2016 suite, Tally ERP 9, Turnitin software for checking plagiarism
- d. Desktops, Laptops, Scanners, Printers, Television, Projectors
- F. Internet connectivity: 50 mbps leased line, WIFI enabled campus
- G. Green Initiatives: Some of the green initiatives adopted at the institute are
 - a. Solar Power project: Installation of 140 kW solar power panels on terrace of college building generates an average of 15399 units per month (70% requirement of electricity), Saving of approx. Rs. 1.6 lakhs every month in electricity bill
 - b. Reduction in power consumption: Use of LED lights, Air-conditioners with motion sensors, mechanically operated Gymnasium equipments
 - c. Reduction in water usage and bill: Use of automated wash taps and water wells.
 - d. Reduction in food wastage: Selected dish on selected days
 - e. Compost and biomass generation: Development of sustainable and decentralized Waste Management System in the campus in collaboration with RUR GreenLife Pvt. Ltd
 - f. Reduction in solvent effluent from Laboratories
 - g. Adoption of appropriate methods for disposal of lab biowaste
 - h. Participation in Green Army initiative of the State Government of Maharashtra by planting 75 tree saplings per annum in and out of the campus
 - i. "Go paperless, Be Digital" Initiative for some operations using ERP Portal
- H. Enterprise Resource Planning (ERP) system:
 - a. Cloud based web application: www.ems.bcp.edu.in
 - Continuous improvement in features and facilities of Education Management System (EMS) for Admission, Academics (Course, Timetable & Attendance), Examinations, and Results
- I. Website: www.bcp.edu.in
- J. Games and Sports: Indoor Games like Chess, Carrom, Foosball, Pool table, Table Tennis; Playground with facilities for outdoor games like Football, Throwball, Volleyball and Cricket
- K. Safety measures: CCTV surveillance of campus, placement of Fire extinguishers and other safety measures on campus
- L. Barrier free environment for differently abled students: Provision of ramp, lift and facility in washrooms

VI. Examinations

- A. The Examination Committee with Controller of examination (COE) conducted online examinations this year due to lockdown.
- B. Periodic tests and Semester examinations are conducted as per the rules and regulations recommended by Academic Council of Bombay College of Pharmacy which

- are in line with norms specified by University of Mumbai (3rd & 4th year B. Pharm and M. Pharm) and Pharmacy Council of India (1st and 2nd year B. Pharm)
- C. Two sets of question papers in softcopy are prepared by paper setters and one paper is randomly selected by the committee. The examination is conducted as per the set procedures listed in SOP.
- D. The gazettes are prepared digitally, and the result is declared after review by the panel of external members.

VII Research activities

- A. Government grants: 02 (AICTE-RPS Rs. 23,72,549 & Lady Tata Rs. 3,15,000)
- B. Industrial projects and consultancy: 29 projects with net revenue generation of Rs. 36.29 lakhs
- A. Amrut Mody Research Fund (AMRF) projects: Corpus fund to recognize, support and encourage research and development activities in the institute: 04
- C. Additional teacher recognized as PG research guide: 01 (Total research guides for M. Pharm: 14, Ph.D.: 07)
- D. Publications: 18 (one in Journal with IF: 15)
- E. Books and Book Chapter: 02
- F. Presentations: 20 (Oral and Poster presentations)
- G. MOUs: 08 (Janssen Pharmaceutica, Belgium-01/09/2020; Neeruja Heath Tech Exclusive Private Limited- 27/05/2021; Abbott India Ltd -31/03/2021; Seth GS Medical College, 22/12/2020; Haffkine Institute for Training, Research and Testing, 28/10/2020, Patlex Business Solutions (30/04/2021), Aspire for Her Management and Consultancy Private Limited-02 nos, 22/06/2021)

VIII. Institutional Activities

- A. National Facility of Research & Training (NFRT): Conduct of 3 training programs for faculty of Department of Pharmaceutical Analysis and PG students
- B. Institute Innovation Cell (IIC) activities: Conduct of 24 different activities in four quarters of 2020-2021
- C. Organization of 12 guest lectures & webinars, 7 ACS-BCP webinars and 4 Alumni Connect and 2 Chai pe Charcha sessions at the institute
- D. Faculty Development Programs organized: Three 5-day AICTE sponsored ATAL Faculty Development Programs (FDPs) were organized by the institute
 - a. Drug Engineering (21-25 Sep 2020)
 - b. Drug Disposition: An Important Factor in Drug Engineering (01-05 June 2021)
 - c. Innovations Management for nurturing Entrepreneurship culture in educational institutes (21-25 June, 2021)
- E. Some of the activities of Internal committees
 - a. IQAC: Recommendations for organization of training programs on administration for non-teaching staff of the institute, requirement of improvement in digital infrastructure, Planning and organization of faculty development programs,

Teachers feedback as per AICTE 360-degree feedback norms, ratification of drafts of grievance, SC/ST, code of ethics, research and plagiarism policies

- b. Placement, Industrial Training & visits, and Career guidance cell: Organization of Pre-placement talks by companies, Recruitment of students as per placement policy, Organization of Industrial visits, Facilitation for online Internships due to Covid pandemic (Industry, AICTE Internshala and other internships)
- c. Student welfare Committee: Provision of Scholarship by IPA-MSB under Students Mutual Aid Fund (SMAF) with the help of BCP Alumni and facilitating access to scholarships available under government & non-government schemes, Book bank fund
- d. Universal Human Values Cell: Constitution of UHV cell of Bombay College of Pharmacy on 11/2/2021
- e. Measures taken during COVID pandemic on campus: Conduct of awareness programs to explain importance of sanitization, social distancing and wearing masks on campus, Strict monitoring of body temperature, pulse rate and oxygen saturation, Maintenance of records, availability of hand sanitizer, Organization of camp at BCP campus for antigen testing of Covid 19 in coordination with Municipal Corporation of Greater Mumbai on 30th Sep 2020 and 1st Oct 2020 (83 people were tested), Conduct of Jan Andolan activity (AICTE initiative) in October 2020 for creating awareness about COVID-19.

IX. Students' Activities

- A. B. Pharm students with GPAT qualification: 21
- B. Number of Ph.D. awarded: 04 students
- C. Poster and Oral presentations and Avishkar awards 06
- D. Participation in Hackathons, innovations competitions
- E. Participation in IPA Students' Forum Maharashtra State Branch (IPA-SF-MSB) activities
- F. Members of editorial board of Echo-BCP and Credence
- G. Extracurricular and CSR activities: Organization of 11 extracurricular activities and 9 College Social Responsibility (CSR) activities with Students council
- H. Students' chapters: 03
 - a. BCP ISPOR: Promotion of field of Health economics and Outcome Research by organization of seminars and webinars, releasing BCP-ISPOR-SC Newsletter
 - b. ACS-BCP: International Undergraduate Student Chapter of the American Chemical Society established in October 2020
 - c. AAPS -BCP: The student chapter is established in June 2021
 - d. Alumni led skill development activities for UG students at the campus in collaboration with TCS is continuing.

X. Awards and Achievements

- A. Expert opinion on "Embracing Tech and Health Care integration" by Dr. Evans Coutinho published in Times Higher Education Bulletin
- B. Article on Industry-Academia Partnership can bring about new TB treatment methods by Mala D Menon in ET Health world bulletin by Times Group
- C. Article on Nanotechnology, a new hope in the fight against the deadly TB by Dr. Ujwala Shinde in ET Health world bulletin by Times Group
- D. Dr. Galvina Pereira with her team Med-TV won the Hackathon in Track D (Healthcare workforce training and Management) at Massachusetts Institute of Technology Hackathon Covid Vs Latin America
- E. Patents granted: 04
 - a. Dr. Mala Menon (September 2020)
 - b. Dr. Ujwala Shinde (May 2020, October 2020)
 - c. Dr. Anuradha Majumdar (June 2021)
- F. Received Appreciation Certificate from AICTE and Smart Cookies Pvt. Ltd for being among the first 151 colleges to successfully complete the first phase of 360-degree feedback process on AICTE 360-degree feedback portal
- G. AICTE CII (Industry Linked Pharmacy Institute) 2020-2021: Ranking in Platinum category
- H. National Institute Ranking Framework (NIRF) 2020 24th rank

XI. Initiatives taken / implemented / continued during the academic year

- A. Mentoring of students by faculty
- B. Class mentors for all programs
- C. Monthly Information System (MIS) for timely collection of faculty data along with proofs
- D. Organization of Student Orientation Program and Induction program for first year B. Pharm and M. Pharm students
- E. AICTE Universal Human Values (UHV) Initiative: UHV sessions were conducted by UHV cell members for first year B. Pharm and M. Pharm students
- F. Maintenance of Academic diary for faculty
- G. Maintenance of Research Record Book for research projects.
- H. Preparation of Policies and guidelines for ERP, Research practices, Promotion of Academic Integrity, Online examination for UG, PG programs
- AICTE Ek Bharat Shreshtha Bharat activities: 4 ("Aaj Ka Vakya" in Indian languages July 2020, Navonmesh Divas 15.10.2020, Independence Day 15.8.2020 and Cuisine of Odisha 18.1.2021)
- J. Sharing of college news, achievement and information on social media: LinkedIn, Instagram, Facebook and Twitter
- K. Online system for collecting Exit form data from B. Pharm final year students in 2020-2021
- L. Discount on fees for all programs to be given in academic year 2021-2022 due to pandemic.

XII. Strengths and Weakness

A. Strengths:

- a. Faculty members possess either a doctoral degree or are pursuing Ph.D. degree
- b. Excellence in undergraduate teaching
- c. Excellent industry-academia linkages and collaboration
- d. Innovative research leading to patents and publications
- e. Pro-active Industry Mentors for each department specialization, in strengthening of the syllabus and course outcome.

B. Weaknesses:

- a. Delayed recruitment of faculty and non- teaching staff members subject to DTE sanctions and permissions
- b. Inadequate resources for maintenance of equipment and AMC
- c. Improvement in ERP system and needs more optimization
- d. Inadequate administrative support to meet autonomy requirements

XIII. Recommended actions

- Placement data can be bifurcated for industry placement and higher education
- Research activities at UG level can be promoted as institute has good industry connect as well as experienced faculty

Date: 20th August, 2021

Place: Mumbai

Dr. Munira Momin

Principal and Professor of Pharmaceutics SVKM's Dr. Bhanuben Nanavati College of Pharmacy Vileparle (West), Mumbai Dr. Tejal Mehta

Professor and Head of Pharmaceutics Institute of Pharmacy and Deputy Director Centre for Quality Assurance and Academics Nirma University, Gujarat