



### AUN-QA PROGRAMME ASSESSMENT REPORT

AUN-QA Assessment No.: 178th	Date of Assessment: 7-11 September 2020
Name of Programme Assessed: Undergraduate Pharmacy Study Program	
Name of University: Universitas Undalas	
Name of Faculty/School: Faculty of Pharmacy	
Name of Management Representative/Designation:	Email:
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## Report Summary

This report is based on the information provided in the self-assessment report (SAR), evidences, site tour and interviews with selected stakeholders including academic and support staff, students, alumni and employers. It should be read together with the preliminary findings presented at the closing ceremony where the key strengths and areas for improvement were highlighted.

The AUN-QA assessment at programme level covers 11 criteria and each criterion is assessed based on a 7-point scale. The summary of the assessment results is as follows:

Criteria	Score
1. Expected Learning Outcomes	4
2. Programme Specification	4
3. Programme Structure and Content	4
4. Teaching and Learning Approach	4
5. Student Assessment	4
6. Academic Staff Quality	5
7. Support Staff Quality	4
8. Student Quality and Support	5
9. Facilities and Infrastructure	4
10. Quality Enhancement	4
11. Output	4
Overall Verdict: <b>Adequate as Expected</b>	

Based on the assessment results, **the Undergraduate Pharmacy Study Program** fulfilled the AUN-QA requirements. Overall the quality assurance implemented for the programme is **adequate as expected**.

Criteria		Strengths	Areas for Improvement
1. Expected Learning Outcomes	1.1 The expected learning outcomes have been clearly formulated and aligned with the vision and mission of the university [1,2]	The 11 ELOs were concised from large number of ELOs in the 2017's version and formulated with reference to the vision, mission, and objectives of the University and the Faculty, the IQF, the Stakeholders, Alumni tracer study.	<p>Alignment between ELOs to Faculty's Objectives, Vision &amp; Mission and to University's V&amp;M should be reviewed to clearly shown the basis of ELOs formulation, i.e., how the ELOs support the internationalization V&amp;M of the university.</p> <p>ELO statements could also be improved by streamlining and clustering similar statements to make them more specific &amp; measurable and alignment to V&amp;M of the Faculty and the University. Thus, an additional ELO can be added to address other needs of the stakeholders where some important knowledge and skills can be integrated.</p> <p>It is suggested that a rationalisation of ELOs be carried out to ensure that relevant learning domain (e.g. cognitive, affective or psychomotor) and its hierarchy of learning outcomes are appropriately applied at the programme, course and lesson levels.</p>
1. Expected Learning Outcomes	1.2 The expected learning outcomes cover both subject specific and generic (i.e. transferable) learning outcomes [3]	The 11 ELOs are categorized into generic and specific skills with 8 specific ELOs and 3 generic ELOs.	<p>The Pharmacy program may map its generic learning outcomes to those defined as 21<sup>st</sup> Century Skills to ensure its graduate are ready to work in modern work environment.</p> <p>ELO statements could also be improved to make them more measurable within the scope of the teaching and learning from the programme, especially, the ones with subjective terms such as "divinity" or "morality", or "non-academic activities"</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
1. Expected Learning Outcomes	1.3 The expected learning outcomes clearly reflect the requirements of the stakeholders [4]	The ELOs are referenced to APTFI (Association of Indonesian Pharmacy Higher Education) guideline, Level 6 of Indonesian Qualifications framework (IQF) and focus groups and surveys of stakeholders.	<p>While surveys and other means were conducted to gather stakeholders' feedback (See also 10.1 and 10.6), how these were used as inputs in the curriculum revision. Particularly the requirements from employers and alumni were not clearly described or evident to fully reflect the requirements from stakeholders. Consider to clearly clarify and document how program ELOs reflect the requirements of the stakeholders.</p> <p>The relationship between the needs and requirements of stakeholders and the programme ELOs should be mapped to facilitate constructive alignment.</p>
2. Programme Specification	2.1 The information in the programme specification is comprehensive and up-to-date [1, 2]	The program specification follows the current curriculum (2019) and published as a student handbook which distributed for new students as well as academics.	<p>Consider combine or integrate parts of the 2019 programme specifications available in several documents and different platform such as Student Handbook in print, curriculum flow and ELOs available online, to make the programme specification be more comprehensive.</p> <p>Consider update the latest programme specification to include changes and information on graduate attributes, groups of sub-disciplinary courses, prerequisites and flow of study to assist the deployment of the 2019 version, while year 3 and 4 students are still using the 2017 curriculum.</p> <p>The dates when the programme specifications are updated or published should be indicated so that its currency can be reflected.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
2. Programme Specification	2.2 The information in the course specification is comprehensive and up-to-date [1, 2]	<p>The format of the course specifications was developed by the Agency of Education Development and Quality Assurance (LP3M) at UNAND and adapted for use in the programme.</p> <p>The content of the course specifications was developed by the lecturers who teach the course based on the criteria and format that is established by LP3M.</p>	<p>The course specification (RPS) can be enhanced to include the alignment of lesson learning outcomes to the course learning outcomes immediately as these are crucial for the delivery of the programme.</p> <p>Consider immediately update the course specifications to the reflect the changes from the 2017 to the 2019 programme, and prepare the updated course specifications for the upcoming year 3 and year 4 students.</p> <p>The contribution of each course in the current RPS should be updated to reflect the designed or actual contributions.</p> <p>The dates when the course specifications (RPS) are updated or published should be indicated so that its currency can be reflected.</p>
2. Programme Specification	2.3 The programme and course specifications are communicated and made available to the stakeholders [1, 2]	<p>The current course description are available in print and on the website and can be accessed by students.</p> <p>Programme specification is communicated via leaflets and through the program website and the open course ware (OCW).</p>	<p>Consider publishing or communicating the integrated and comprehensive program specification to other stakeholders such as employers, alumni or key partners immediately or as soon as possible to clarify the transition of the 2017 curriculum to the 2019 curriculum.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
3. Programme Structure and Content	3.1 The curriculum is designed based on constructive alignment with the expected learning outcomes [1]	The curriculum document is developed based on the Programme ELO of UPSP, which is formulated with considering stakeholders' feedback, as well as the vision and mission of UPSP and UNAND, to obtain the matrix of materials. Each lesson material is distributed to the course which has its own course ELO.	<p>The improvement on the constructive alignment, especially in the course level, to show the linkage among program ELOs, course ELOs, teaching strategies, and assessment should be strongly considered.</p> <p>Consider demonstrating the mapping of the curriculum with the graduate attributes just to ensure the constructive alignment of the ELO to the courses and how the ELOs are met.</p>
3. Programme Structure and Content	3.2 The contribution made by each course to achieve the expected learning outcomes is clear [2]	Contribution Matrix of module/course to ELOs shows the sequence and the contribution made by each course to achieve the stated expected learning outcomes.	<p>The mapping system of the individual required courses toward the achievement of the programme LOs (Table 6) should be reviewed to assist the development of the appropriate T&amp;L and assessment tools and understandings of the contributions among the teachers responsible for the courses.</p> <p>Result of the review of the contribution matrix should also be updated immediately into its the current RPS or course specifications (see also 2.1 and 2.2) as these are crucial for the delivery of the programme.</p> <p>May consider revisiting the contribution matrix of module/course and relate it to the pre-requisites of each course to ensure that competencies are achieved by students upon promotion to the next year level.</p> <p>Development of a learning sequence and assessment plan should be conducted to enhance the relevance and integration as well as to establish the sequence of each course/module/topic.</p>

Criteria		Strengths	Areas for Improvement
3. Programme Structure and Content	3.3 The curriculum is logically structured, sequenced, integrated and up-to-date [3, 4, 5, 6]	<p>The 2019 programme of 144 credits is reference to the regulation of the National Standard for Higher Education.</p> <p>The curriculum contents are kept up to date according to APTFI (Associations of Indonesian Pharmacy Higher Education) guidelines, stakeholder feedback, IQF, as well as UKAI (Indonesian Pharmacists Competence Examination) blueprint.</p>	<p>Consider depicting the sequence, integration and structure in the programme specifications documents both online and offline that are communicated to potential students, current students and potential employers. (See also 2.3)</p> <p>More flexible/more elective courses in each specialization (hospital, clinical, industrial/manufacturing, regulatory, public health) will better prepare graduates in specific work areas.</p> <p>Integration of experiential learning (internship) in the curriculum early on to supplement the didactic coursework and technical skills to further enrich the student's pharmacy education experience. This will also prepare the students to develop professional qualities such as flexibility, teamwork, and good communication skills as member of the health care team.</p>
4. Teaching and Learning Approach	4.1 The educational philosophy is well articulated and communicated to all stakeholders [1]	<p>UPSP's educational philosophy refers to the rules developed by Kemenristekdikti, the Pharmacist Professional Organization (Indonesian Pharmacist Association) and UNAND's educational philosophy "The Andalasian Character" which is built on 4 elements, namely: Spiritual, Science, Charity, and Social.</p> <p>Student-centered learning (SCL) and active learning approach with 2-credit lecture attached with 1-credit laboratory.</p>	<p>Although the educational philosophy is communicated to academic staff and students, it is suggested that this is explained well so that it will be properly and clearly understood, articulated and translated into the T&amp;L approaches that instill the philosophy.</p> <p>It is suggested that the educational philosophy be reviewed to reflect the unique teaching and learning in UPSP and the articulation of key word such as "The Andalasian Character" so that it will become as a unique character which will be manifested by every graduate.</p>

Criteria		Strengths	Areas for Improvement
4. Teaching and Learning Approach	4.2 Teaching and learning activities are constructively aligned to the achievement of the expected learning outcomes [2, 3, 4]	<p>All teaching and learning activities are carried out in a quality manner, which emphasizes the active role of students through the Student-Centered Learning (SCL) approach. This approach effectively supports students to obtain ELO when graduating.</p> <p>Various teaching and learning strategies and activities have been implemented at UPSP. Some courses that require an in-depth analysis of cases that occur in reality, can apply the problem-based learning/discovery learning method so students can find solutions for some problems in reality.</p>	<p>More involvement of professionals and practitioners as guest speaker or part-time/co-lecturer in the learning process may be considered for giving a variety and up-to-date applications and practices in a specific pharmacy practice area such as in hospital/clinical pharmacy, pharmaceutical industry, community pharmacy, regulatory, public health, clinical research, etc.</p> <p>The quality and impact of internship done thru students' clubs should be reviewed as this may be a good basis for the inclusion of internship in the curriculum.</p> <p>Consider the integration of latest technology to enhance the teaching and learning process.</p>
4. Teaching and Learning Approach	4.3 Teaching and learning activities enhance life-long learning [5]	Teaching and learning activities (assignment, final project, etc) are used in order to enhance life-long learning.	<p>It is suggested to use more case scenarios and have more practical activities in lecture and practice classes to prepare students for a real working experience.</p> <p>It is also suggested to allow students to have more exposure to variety of activities to provide them with the experiential learning which simulates actual workplace scenarios.</p> <p>May consider the use of other teaching and learning activities, such role play, practical session, field trip, etc., to enhance life-long learning.</p> <p>May consider providing continual education to alumni for life-long learning and professional development.</p>



<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
5. Student Assessment	5.1 The student assessment is constructively aligned to the achievement of the expected learning outcomes [1, 2]	<p>A diversity of assessment techniques was used and mainly in alignment with the course learning outcomes.</p> <p>To assess the students' achievements of each ELO, several assessment methods are described in most of the courses in UPSP that demonstrates the constructive alignment of the UPSP curriculum with the ELO.</p> <p>To ensure the congruity of assessment methods with ELO, several key achievement indicators are applied.</p>	<p>It is suggested to fully implement OBE by carrying out assessment on the achievement of the learning outcomes at course and programme level, analyzing them and using the findings as basis of improvement.</p> <p>It is strongly recommended to review the constructive alignment from PLOs/CLOs to teaching and learning and assessment along with the sharing of lesson-learned from the assessments among teachers.</p>
5. Student Assessment	5.2 The student assessments including timelines, methods, regulations, weight distribution, rubrics and grading are explicit and communicated to students [4, 5]	<p>Assessment information and rubrics, if any, such as project, internship and thesis rubric are made known/communicated to the students at the first session of each course and via RPS.</p> <p>Grading scheme is explicitly written in the student handbook.</p>	<p>The linkage between student assessments and the achievement of the course ELOs should be developed and analysed for improvement.</p> <p>The use of rubrics should be clearly communicated to the students so that they are made aware on how their works/tasks are actually graded against criteria and standards.</p> <p>More common rubrics should be developed and the existing rubric should be updated to make it descriptive.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
5. Student Assessment	5.3 Methods including assessment rubrics and marking schemes are used to ensure validity, reliability and fairness of student assessment [6, 7]	<p>The assessment rubric and marking scheme are developed by lecturers (teaching team) for each course and approved by Quality Assurance Task Force at the study programme level (GKM) and peer review to ensure validity, reliability and fairness of the assessment process.</p> <p>The UPSP already have assessment rubrics for presentation, assignments, practical examination, seminar and comprehensive examination.</p>	<p>It is suggested to revisit descriptors in the rubric as they might not cover or fully align with learning outcomes.</p> <p>Rubrics designed with criteria, performance levels and descriptors be used to support the reliability, validity, and fairness of the assessment which should be consistent with the university grading system.</p> <p>More common rubrics should be developed and the existing rubric should be updated to make it descriptive.</p> <p>The validity of test items (i.e. questions) against the achievement of learning outcomes should be reflected in the marking guides.</p>
5. Student Assessment	5.4 Feedback of student assessment is timely and helps to improve learning [3]	<p>Student assessment feedbacks are timely given for students.</p> <p>The academic staff supervises and monitors student performance.</p>	<p>While the result of the assessment may help students improve their learning, it is not evident how the assessment results are used by the academic staff; it is therefore suggested to analyze results particularly of formative assessments as tools for improvement of teaching-learning strategies.</p>
5. Student Assessment	5.5 Students have ready access to appeal procedure [8]	<p>An appeal process is in place for students who wish to clarify or review their final mark. The process can be accessed at the UPSP website.</p>	

Criteria		Strengths	Areas for Improvement
6. Academic Staff Quality	6.1 Academic staff planning (considering succession, promotion, re-deployment, termination, and retirement) is carried out to fulfil the needs for education, research and service [1]	<p>The academic staff planning is matched with the need and considering the academic staff-to-student ratio, research activities and community service, current development in learning methods as well as financial capacity.</p> <p>The academic staff of UPSP is required to have master's degree in pharmaceutical area included pharmacology and clinical pharmacy, pharmaceutical technology, pharmaceutical biology and pharmaceutical chemistry, pharmacist professional degree and assigned based on their expertise in a unit of UPSP known as Unit Bidang Ilmu (UBI)</p>	<p>UPSP may improve the academic staff planning matrix to show the specific needs of each academic staff in fulfilling his/her obligation towards achieving the Faculty's and University's missions and vision.</p> <p>It is suggested that the manpower planning take into consideration the mission and strategic competencies of academic staff so that the mission of the university and the potential of each staff can be realised.</p>
6. Academic Staff Quality	6.2 Staff-to-student ratio and workload are measured and monitored to improve the quality of education, research and service [2]	There are 52 academic staff with a staff-to-student ratio of 12.9 (only 1 <sup>st</sup> part of 2019-2020 was computed).	<p>It is recommended that UPSP should regularly monitor the workload for planning to improve the quality of education, research and services that also support the vision and mission of the Faculty and the University. This may be done by:</p> <ul style="list-style-type: none"> <li>• Reviews the academic staff workload</li> <li>• Encourages productive research undertaking aligned with pharmacy (i.e. drug product development)</li> <li>• Encourages the pursuit of PhD study of academic staff in the area needed to fulfill the vision and missions.</li> </ul>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
6. Academic Staff Quality	6.3 Recruitment and selection criteria including ethics and academic freedom for appointment, deployment and promotion are determined and communicated [4, 5, 6, 7]	<p>The recruitment of new staff is planned by the UPSP and executed by Kemenristekdikti. The admission of academic staff is held in four steps: administration selection, written test (basic and pharmaceutical knowledge examination), micro-teaching test, interview, result announcement, and assignation.</p> <p>Moreover, there are two types of academic staff deployment, which are respected and disrespected deployment. Academic staff can be deployed with respect when reaching the age of 65 y/o for associate professor and assistant professor and 70 y/o for professor.</p>	<p>UPSP should analyse and show evidence that the need to recruit new academic staff is based on student-staff ratio and the human resource planning.</p> <p>It is suggested that the recruitment and promotion criteria be aligned with the competences of academic staff in each career track.</p>
6. Academic Staff Quality	6.4 Competences of academic staff are identified and evaluated [3]	<p>The competence of the academic staff can be identified through the Certification for Lecturer which is achieved through an examination organized by the Kemenristekdikti.</p> <p>The academic staff are evaluated through two processes, the GKM evaluation and students' evaluation questionnaire results to improve the next teaching activity performance.</p>	<p>It is suggested that UPSP explores the need of a competency model and career track scheme to aid in building strategic competencies and to tap the potential of each academic staff. May refer to FIP (International Pharmaceutical Federation) Global Competency Framework.</p> <p>UPSP may promote pedagogical research and sharing of best practices in teaching &amp; learning to enhance competencies of academic staff.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
6. Academic Staff Quality	6.5 Training and developmental needs of academic staff are identified and activities are implemented to fulfil them [8]	The academic staff of UPSP receive opportunity to improve their competency and experience in teaching, research and service through the Faculty of Pharmacy, UNAND and Kemenristekdikti training programs, including PEKERTI-AA, training program of English proficiency improvement, research and community service.	<p>Training on outcome-based education (OBE) such as writing course outcome, learning taxonomy, aligning course outcomes with the programme ELOs, formulating rubrics used for assessment as well as digital instructional design is strongly recommended.</p> <p>On-the-job-training (OJT) of OBE as part of any curriculum reviewing process, i.e., course learning outcome reviews, review of T&amp;L approaches and assessment tools, is encouraged among staff.</p>
6. Academic Staff Quality	6.6 Performance management including rewards and recognition is implemented to motivate and support education, research and service [9]	<p>Rewards and recognition for academic staff of UPSP are awarded at faculty, university and government level in education, research and service area based on rector and government regulations.</p> <p>UNAND also gives awards and recognitions to the academic staff for their accomplishment to improve the quality of education, research, and service.</p> <p>UNAND regularly funds high-quality research of the academic staff and grants an incentive for the research results published at reputable international journals.</p>	<p>Recognitions in services and networking with external entities may be further highlighted to encourage staff toward the vision and mission in this area. The connections from academic services and networking can also benefit the education and research aspects of the programme in the future.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
6. Academic Staff Quality	6.7 The types and quantity of research activities by academic staff are established, monitored and benchmarked for improvement [10]	<p>The research of the academic staff is monitored by UNAND and Kemenristekdikti through SINTA (Science and Technology Index for Lecturer). In addition, the research activities of the academic staff are monitored through BKD in every semester.</p> <p>The number of publications ranged from 88 to 127. The number of publications per academic staff ranged from 1.87 to 2.95 (2015-2016 to 2018-2019).</p>	<p>The benchmarking activities for research to local and international institutions are not evidently explicit.</p> <p>It is recommended that UPSP enhances the interdisciplinary opportunities and collaborative research with government agencies, industry and partner universities.</p> <p>It is suggested that UPSP may also introduce schemes to encourage or promote an increase in number and quality of international publications in ISI- and Scopus-indexed journals.</p>
7. Support Staff Quality	7.1 Support staff planning (at the library, laboratory, IT facility and student services) is carried out to fulfil the needs for education, research and service [1]	<p>Planning for support staff is carried out by the faculty and supporting units. The plan is established for a 5-year period.</p>	<p>Support staff planning shall consider not only the number of support staff needed to deliver the services but also the qualifications and competences required. This will help facilitate the training and development for support staff pertinent to the needs of the university and the Faculty per se.</p>
7. Support Staff Quality	7.2 Recruitment and selection criteria for appointment, deployment and promotion are determined and communicated [2]	<p>Recruitment mechanism is established for support staff.</p> <p>The PNS support staff are promoted through a selection and examination which are regulated in the ASN Ordinance and STATUTA of the University.</p>	<p>Deployment and promotion of technical support staff in the programme should be reviewed to find a way to further engage technical support staff into education and research aspects of the programme.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
7. Support Staff Quality	7.3 Competences of support staff are identified and evaluated [3]	<p>Competences of support staff are identified and evaluated by the faculty and university.</p> <p>The supporting staff are recruited into their position based on their degree, skills, and competency.</p>	<p>Job descriptions should explicitly define the competences needed for each position.</p> <p>Considering the changing nature of how services are delivered in the digital era as well as the globalization and UNAND vision to become an excellent world – class university, UPSP may consider IT and English as necessary competences of support staff.</p>
7. Support Staff Quality	7.4 Training and developmental needs of support staff are identified and activities are implemented to fulfil them [4]	<p>Training and development are established by the faculty.</p> <p>Planned and sporadic training activities are provided.</p>	<p>Training need analysis should be carried out and implemented pertinent to job descriptions.</p> <p>Support for further study (higher degrees), IT and English trainings are recommended. (See also 7.3)</p>
7. Support Staff Quality	7.5 Performance management including rewards and recognition is implemented to motivate and support education, research and service [5]	<p>Performance management is centralized and managed by the unit for remuneration and human resource development.</p> <p>Support staff at UPSP are also entitled for reward and recognition for their efficient and productive work processes and outcomes.</p>	<p>The performance evaluation criteria of support staff could be more quantitative.</p> <p>Performance management of technical support staff in the programme should be reviewed to find a way to further engage technical support staff into education and research aspects of the programme.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
8.Student Quality and Support	8.1 The student intake policy and admission criteria are defined, communicated, published, and up-to-date [1]	The intake and admission policies are regulated by the government. Three recruitment systems of student admission are available (SNMPTN, SBMPTN and SMMPTN). The systems were communicated, published and up-to-date.	Though the programme has enjoyed a good number of applicants, UPSP may put more effort in promoting the program to attract more competent students.
8.Student Quality and Support	8.2 The methods and criteria for the selection of students are determined and evaluated [2]	A committee is established to assess and select the potential candidates. The selection is based on the achievement scores.  The Higher Education Affirmation Scholarship Program (ADik) is one of the government's efforts to improve access and study opportunities at tertiary institutions for High School graduates or equivalent who have good academic potential but have limited access to higher education.	A correlation analysis of admission criteria with student academic performance may be helpful in determination of admission policy as well as early support for students in need and intervention.
8.Student Quality and Support	8.3 There is an adequate monitoring system for student progress, academic performance, and workload [3]	A credit policy is in place for student to plan their study load.  The monitoring system of student progress, academic performance, and workload are academic advisor responsibility.  The UPSP UNAND manages students' progress, academic performance, and workload via the academic portal system that can be accessed by students, academic advisor and parents.	It is recommended that the faculty closely monitors student academic progress through their academic advisor in connection with final year project's advisor to have early intervention to help students graduate on time.



<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
8.Student Quality and Support	8.4 Academic advice, co-curricular activities, student competition, and other student support services are available to improve learning and employability [4]	<p>The UPSP has an academic advisor who encourages students to follow co-curricular activities, student competition, and other student support services to enhance learning and employability skills for future Pharmacist Profession Study.</p> <p>Student Activities Performance System (SAPS) is an assessment of student activities in extra-curricular activities during their studies at UNAND for the development of students' interpersonal and intrapersonal skills to support employability.</p>	<p>UPSP may put more effort in student mobility for those students in regular programme.</p> <p>Enhance internationalisation and student mobility schemes (exchange students/professors, attendance in international fora, international research presentations, etc) to better align with the "international" component of the vision of UNAND and the UPSP.</p> <p>Further enhance and support the activities created and managed by student bodies or groups.</p>
8.Student Quality and Support	8.5 The physical, social and psychological environment is conducive for education and research as well as personal well-being [5]	<p>The UNAND provide a conducive and comfortable environment for improving the learning situation.</p> <p>The UPSP UNAND provides adequate facilities for the implementation of quality education to produce graduates who are competent in the pharmaceutical field.</p>	<p>Due to the COVID pandemic, the teaching and learning are blended. The pshychological effect due to the online learning should be closely monitor and the environment of the online learning should be adjusted as needed.</p>

Criteria		Strengths	Areas for Improvement
9. Facilities and Infrastructure	9.1 The teaching and learning facilities and equipment (lecture halls, classrooms, project rooms, etc.) are adequate and updated to support education and research [1]	<p>All the lecture rooms/halls in UPSP are equipped with LCD projectors, white/blackboard, marker, and sound systems (for certain rooms) for interactive lecture tools and wifi.</p> <p>There are provisions for educational activities, such as 17 pharmaceutical laboratories, 9 laboratories used as teaching or research laboratory and academic staff rooms, the hall room, reading room, OSCE center, CBT room, and another 8 teaching laboratories and academic staff rooms in another floor.</p>	<p>Flexible classroom design and configuration may be explored to enhance collaborative learning experience and support teaching and learning approaches aligned with the advancements in pharmacy education such as on patient counselling, drug information services, etc.</p> <p>More equipments or systems to facilitates online teaching and learning, beside the existing infrastructures in the classrooms, may be considered in case of full-scale on-line learning due to COVID pandemic.</p>
9. Facilities and Infrastructure	9.2 The library and its resources are adequate and updated to support education and research [3, 4]	<p>There are two (2) libraries which can be accessed by students and academic staff including the Central Library of Andalas University and the reading room of Faculty of Pharmacy.</p> <p>There is OPAC (Online Public Access Catalogue) equipped with SLiMS (Senayan Library Management System) to access collections available with computerized systems.</p>	<p>The Library may need to provide more space for pharmacy students for collaborative learning.</p> <p>Consider digitizing essential materials in the reading room of the Faculty of Pharmacy to support remote reading and learning.</p>
9. Facilities and Infrastructure	9.3 The laboratories and equipment are adequate and updated to support education and research [1, 2]	<p>There are 17 types of pharmaceutical laboratories available for student learning and every laboratory is led by the laboratory head and assisted by the laboratory analysts.</p> <p>The laboratory has complete equipment such as FT-IR and UV-VIS spectrophotometer, GC-MS, etc.</p>	<p>Pharmaceutical laboratories must emphasize the use of Good Manufacturing Practices (GMP) in both drugs and cosmetics.</p> <p>It is suggested that the use of OSCE Rooms not only limited for mock assessments but also for simulation activities.</p> <p>Maximize the use of the laboratories to become “skills labs” for the purpose of simulation activities to enhance pharmaceutical care experiences.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
9. Facilities and Infrastructure	9.4 The IT facilities including e-learning infrastructure are adequate and updated to support education and research [1, 5, 6]	<p>The information system to support academic administration at UNAND has been integrated with Academic Information System (SIA).</p> <p>The e-learning based teaching and learning at UNAND is called iLearn which use specific domains for the Faculty of Pharmacy.</p> <p>The UPSP also has computer laboratory (CBT room) equipped with 127 computers and internet access for computer-based assessment purposes.</p> <p>All research and publications at Andalas University must be registered in Research and Community Service Information System (SIMLIBTAMAS UNAND).</p>	<p>Better wifi access and connectivity are recommended for effective Teaching and Learning.</p> <p>Consider data or internet network package for students who may not be able to come to university and cannot afford to connectivity.</p> <p>See also 9.1 and 9.2</p>
9. Facilities and Infrastructure	9.5 The standards for environment, health and safety; and access for people with special needs are defined and implemented [7]	<p>UNAND is a green campus surrounded by hills and diverse plants.</p> <p>There is a center of environmental study (Pusat Studi Lingkungan Hidup) for monitoring the environment around the campus.</p>	

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
10. Quality Enhancement	10.1 Stakeholders' needs and feedback serve as input to curriculum design and development [1]	Stakeholders are involved in the curriculum review and feedback is gathered through focus groups, survey, and tracer studies.	<p>See also 1.3</p> <p>Consider officially forming a connection with representatives of the nation-wide networks in the Faculty's Alumni Association to get up-to-date and continuous feedbacks from the practitioners.</p> <p>It is suggested that UPSP keeps closer contacts and open communication with employers to find out the needs and trends of the industry.</p>
10. Quality Enhancement	10.2 The curriculum design and development process is established and subjected to evaluation and enhancement [2]	The curriculum has been evaluated regularly at least every 5 years according to Regulation of the Research, Technology and Higher Education Ministry.	<p>The constructive alignment planning and implementation should be explicitly embedded in the curriculum design process.</p> <p>Curriculum development is suggested to be benchmarked from other universities offering pharmacy program in Indonesia and in Asia. A timetable for such development should be created to reflect the actions that need to be taken.</p> <p>Attendance in conferences organized by Asian Association of Schools of Pharmacy (AASP) is recommended to learn what other pharmacy schools are doing which ensures that the pharmacy program offered by UPSP is aligned with global requirements.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
10. Quality Enhancement	10.3 The teaching and learning processes and student assessment are continuously reviewed and evaluated to ensure their relevance and alignment [3]	<p>Teaching and learning evaluation is carried out by the internal quality assurance system (SPMI) of UNAND.</p> <p>At the level of the study program, the teaching and learning process is evaluated by a unit called GKM under the coordination of BAPEM.</p>	<p>UPSP may consider to involve alumni and employers in teaching and learning to team-teaching in order to expose students to be more aware of the industry practice. (See also 4.2)</p> <p>It is strongly recommended to immediately review the constructive alignment from PLOs/CLOs to teaching and learning and assessment tools or rubrics (see 5.3), along with the sharing of lesson-learned from the assessments among teachers. (See also 5.1 and 5.4)</p>
10. Quality Enhancement	10.4 Research output is used to enhance teaching and learning [4]	Lecturers' research results used as teaching material in book form.	It is suggested that pedagogical patient-oriented research (i.e on clinical pharmacy), pharmacokinetics, preformulation, and drug product development be explored other than the extraction and characterization of natural products to enhance teaching and learning as well as OBE implementation. An immediate development of a suitable research framework is highly recommended.
10. Quality Enhancement	10.5 Quality of support services and facilities (at the library, laboratory, IT facility and student services) is subjected to evaluation and enhancement [5]	<p>The monitoring and evaluation of support services is carried out at the faculty and university levels.</p> <p>Monthly check on facilities is carried out.</p>	<p>Analysis of service evaluation should be more specific. Questionnaires and reports should be categorized per stakeholders and per service provided.</p> <p>Consider more involvement of technical support staffs in monitoring and evaluation of their related services.</p>

Criteria		Strengths	Areas for Improvement
10. Quality Enhancement	10.6 The stakeholder's feedback mechanisms are systematic and subjected to evaluation and enhancement [6]	<p>The mechanism to gather feedback from employers and alumni is done through tracer study, gathering and workshops.</p> <p>Feedback from students and staff is organized.</p>	<p>See also 1.3</p> <p>It is suggested that UPSP establishes a systematic and stronger communication link with alumni and employers to get feedback for curriculum design and development to address the employers' needs (See also 10.1).</p> <p>Results of the stakeholders' survey must be properly analysed and utilized to improve the curriculum; this will help prepare the students with knowledge and skills pertinent to their career tracks most especially providing them the necessary competences to pursue the professional pharmacy program and eventually get licensed to work as pharmacist in any practice area.</p>
11. Output	11.1 The pass rates and dropout rates are established, monitored and benchmarked for improvement [1]	The pass rate and dropout rate are monitored.	<p>UPSP may reconsider to review how it monitors the dropout rates. Table 20 in the SAR shows 0% drop out rate from AY 2011-2015; it is recommended that the Faculty performs the same study to determine if there is a difference from 2015 to 2019. This may be benchmarked with other academic units in the university for further improvement.</p> <p>It is recommended that UPSP should analyze properly the trend for the average study length to seek for measures to improve it; student progress should be monitored to provide timely support, especially for the final projects and other requirements for graduation.</p>

<b>Criteria</b>		<b>Strengths</b>	<b>Areas for Improvement</b>
11. Output	11.2 The average time to graduate is established, monitored and benchmarked for improvement [1]	The trend for the average study length reaches the highest stage in the eighth half (49.13%).	<p>It is recommended that UPSP should closely monitor the average study length of the cohorts in the 2017 and 2019 curriculum to find out the average time to graduate and the factors that help decrease the average study length.</p> <p>Benchmarking of output data, such as pass rate, on-time graduation, graduate employability, and research activities with other competing or relevant universities would be useful in seeking best practices. (11.1, 11.2, 11.3, 11.4)</p>
11. Output	11.3 Employability of graduates is established, monitored and benchmarked for improvement [1]	The waiting time for the employability of UPSP's graduate was 0 – 3 months (95.45%).	<p>The alumni tracer survey with sufficient number of respondents is reliable for seeking for improvement measure based on feedback. Therefore, tracer studies may be conducted more frequently and systematically to benchmark graduate employability. UPSP may seek information such as knowledge and skills that the graduates need in each practice area to help facilitate the curriculum revision. (See also 10.1)</p> <p>Benchmarking of output data, such as pass rate, on-time graduation, graduate employability, and research activities with other competing or relevant universities would be useful in seeking best practices. (11.1, 11.2, 11.3, 11.4)</p>

Criteria		Strengths	Areas for Improvement
11. Output	11.4 The types and quantity of research activities by students are established, monitored and benchmarked for improvement [2]	The number of student research in pharmacology and clinical pharmacy is the highest percentage among other fields which is in line with the number of lecturers in that field	<p>Since thesis is required as a final project, Interviewed alumni suggested to have a venue where these research outputs are presented such as having a Research Week or a Research Colloquium; this may be a good platform where students and academic staff are informed regarding their works and thus, other students can benchmark from for improvement and innovations.</p> <p>International benchmarking on research is highly suggested through attendance or participation in international fora, conventions, and conferences which are specific to the pharmacy practice like in FIP, FAPA, and AASP to improve research competencies and to search for innovations.</p> <p>Benchmarking of output data, such as pass rate, on-time graduation, graduate employability, and research activities with other competing or relevant universities would be useful in seeking best practices. (11.1, 11.2, 11.3, 11.4)</p>
11. Output	11.5 The satisfaction levels of stakeholders are established, monitored and benchmarked for improvement [3]	Stakeholders' satisfaction with the programme is measured and monitored.	<p>See also 10.1 and 10.3</p> <p>Employers and alumni suggested to enhance graduate's communication skills, research skills, and collaborative skills.</p> <p>Alumni suggested to have more experiential learning/internship in different practice areas like, hospital/clinical, community, and manufacturing pharmacy.</p>