



Article

Evaluation of grading systems in Pharmacy education practiced by public and private universities in Bangladesh

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Grading system is an integral part of education system of a country, and this is the process of evaluation of the students about their academic excellence and expertise. Employers give proper value and rely on the grading of the graduates to evaluate their employability in the selection process of job. So, it is expected to have a uniform grading system in all the academic institutions of a country to depict a picture of nondiscrimination and equality differentiation of the graduates. There is a dissatisfaction of the Pharmacy graduated passing from different universities in Bangladesh due to the differences of grading systems in different private universities which is badly impacting to the graduates for getting their jobs in pharmaceutical companies and different other private and public universities and even getting scholarships in higher education abroad. This study aimed to report the actual grading systems followed by different private and public universities offering Pharmacy education in Bangladesh. The information about the grading system of different universities were collected from the respective website of the university as well as by contacting with the relevant person/authority of the university that do not have proper information in their websites. Pharmacy education is provided by 13 public and 30 private universities in Bangladesh. Our investigation found that all the public universities follow the UGC recommended uniform grading system. Among the 30 private universities, 25 universities follow the UGC recommended grading system; however, 5 universities do not follow the UGC provided grading system, rather these universities are following own different grading system. All the five grading systems are also different from one another. Due to the differences in the grading systems practiced by different private universities in Bangladesh, a subtle discrimination has grounded among the graduates seeking for jobs and higher education in foreign countries. In order to maintain quality education for all in the higher education level and for the preparation of the same level field for job competition and job preference, there is no other alternative of uniform grading systems in the Pharmacy education in Bangladesh. The UGC should strictly implement the uniform grading system approved and recommended by it to eliminate the discriminations. .

Keywords: Pharmacy education, grading system, grade point, cGPA, private university, public university, Pharmacy profession in Bangladesh

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Introduction

Grading is an important part of an education system which has been used for a long time to evaluate students' academic performance, qualifications, and the level of learning (Dahlgren et al., 2009). For this purpose, a well decorated and uniform grading system is obvious for all the academic institutions, but the real scenario regarding grading in different Universities of Bangladesh is promiscuous (Karim and Hossain, 2014). A uniform grading system in a country is a must to ensure the quality education, competency and job competition among the graduates. Although the University Commission (UGC) in Bangladesh recommended a uniform grading system for all public and private universities with effect from session 2006-2007 and the university authorities were instructed to finalize the results of all examinations according to that guideline and issue transcript accordingly, but unfortunately few private universities are still not following the uniform grading system ignoring the recommendation of UGC (UGC, 2024). The consequences of different grading systems are grave for the students and graduates seeking jobs (Alam et al., 2022). As it is mentioned earlier that grading is one of the important tools for the assessments of students' learning outcomes, it has important role for getting jobs as the recruiters evaluate the merit of the applicants based on the academic grades the applicants obtained (Pham and Nguyen, 2023). Graduate students from different universities in Bangladesh are evaluated with their CGPA in the job sectors and higher education (Ahmed and Salim, 2018). CGPA in a sense provides some digits which have been believed to depict academic performances of a student. Although all the public universities in Bangladesh follow the uniform grading system provided by UGC (Hassan, 2018), the uniform grading system has been distorted among the private universities because of the adoption of different grading systems other than that of UGC by some private universities.

The haphazard condition of grading systems in Pharmacy education in Bangladesh create a lot of suffering to the graduates while seeking and competing for job in pharmaceuticals companies and other fields. However, no research has been presented or no report has been published on grading system of Pharmacy education in Bangladesh. Therefore, we aimed to investigate the actual scenario of grading systems available and practiced in Bangladesh for undergraduate and post graduate programs and to provide future directions on grading system for the betterment of Pharmacy education and benefits of Pharmacy graduates in Bangladesh.

Materials and Methods

The information about the grading policy and grading systems of different public and private universities were collected from the website of the respective university and by contacting with the Pharmacy department office or contacting to the concerned person of the university authority which did not provide grading information in their website or don't have functional website. List of the universities (both public and private) was collected from the website of University Grants Commission (UGC) of Bangladesh and the list of the public and private universities

offering Pharmacy education was collected from the available information in the website of Pharmacy Council of Bangladesh (PCB, 2024a; PCB, 2024b).

Results and Discussion

Public and private universities offering Pharmacy education in Bangladesh

According to the information from UGC, there are 53 public and 106 private universities in Bangladesh (UGC, 2024) (Table 1). As per the available information from Pharmacy Council of Bangladesh, 13 public and 30 private university offer Pharmacy education in Bangladesh (Table 1) (PCB, 2024a; PCB, 2024b).

University Grants Commission of Bangladesh was established on 16 December 1972 and later enacted as an autonomous apex body in Higher Education under the President Order No. 10 of 1973. The function of UGC was to cater the academic and financial needs and demands of the existing six universities in Bangladesh at that time. With time the higher education sector in Bangladesh has expanded significantly and now the functions of UGC are allocation of funds to universities, facilitate the development of higher educational system in Bangladesh with main purpose of upgrading the qualities of teaching-learning at the tertiary level, encourage cutting-edge innovative research and development, and improve governance issues at the universities. Also, UGC is responsible for formulating higher education policy and quality assurance to meet the international standard and advise the Government accordingly. To maintain the harmony and equal evaluation of graduates as well as to ensure the quality education in universities, the UGC has formed uniform grading system to follow by all the private and public universities in Bangladesh.

Table 1: Number of Universities offering Pharmacy education in Bangladesh

Total Universities in Bangladesh		Offer Pharmacy Programs	
		B. Pharm	M. Pharm
Public	53	13	10
Private	106	30	12

UGC recommended uniform grading systems

In order to maintain harmony in the grading of the students, the UGC recommended uniform grading systems for all public and private universities with effect from session 2006-2007 and the university authorities were instructed to finalize the results of all examinations according to that guideline and issue transcript accordingly. The UGC recommended uniform grading system has been presented in Table 2. As shown in the Table 2, the highest academic letter grade of a student is A+ (A-plus) and grade point is 4.0 if the student can obtain 80% or above marks. The lowest letter grade of a student is "D" with grade point 2.0 if the student's obtained mark is between 40% to less than 45%. Less than 40% marks is considered to be failed which is indicated as the letter "F" with the corresponding grade point "0.0".

Table 2: Grading system and grade points recommended by University Grants Commission of Bangladesh (UGC, 2024)

Marks obtained out of 100	Letter Grade		Grade Point
80% and above	A+	(A Plus)	4.0
75% to less than 80%	A	(A Regular)	3.75
70% to less than 75%	A-	(A Minus)	3.5
65% to less than 70%	B+	(B Plus)	3.25
60% to less than 65%	B	(B Regular)	3.0
55% to less than 60%	B-	(B Minus)	2.75
50% to less than 55%	C+	(C Plus)	2.5
45% to less than 50%	C	(C Regular)	2.25
40% to less than 45%	D		2.0
Less than 40%	F		0.0

Status of public and private universities following or not following the UGC recommended grading system

The status of public universities in compliance with the grading system recommended by the UGC has been presented in Table 3. As per the information of Pharmacy Council of Bangladesh (PCB), Pharmacy education is currently offering by 13 public universities in Bangladesh. As shown in Table 3, all the 13 public universities follow the UGC recommended uniform grading system. Therefore, public universities do not have any issue for the incompliance of the grading system of UGC.

All the 13 public universities offer Bachelor of Pharmacy, however, 3 public universities named Kushtia Islamic University, Mawlana Bhashani Science & Technology University and Pabna University of Science and Technology have not yet started the Master of Pharmacy program (Table 3).

Similarly, the status of private universities in compliance with the grading system recommended by the UGC has been presented in Table 4. It has been reported that among the thirty (30) private universities offering at least Bachelor of Pharmacy (Honors/Professionals) education, twenty-five (25) private universities are following the UGC recommended uniform grading system likewise the public universities. However, five private universities are not following the UGC recommended uniform grading system. The universities that do not follow the UGC recommended uniform grading system named North South University (NSU), Independent University Bangladesh (IUB), Dhaka International University (DIU), BRAC University (BRACU), and United International University (UIU). The own grading systems of those five universities are presented in Table 5. As shown in the Table 5, the North South University, Independent University Bangladesh, BRAC University and United International University do not have "A+" (A plus) letter grade unlike to the UGC grading system. The highest letter grade of those universities is "A" with the corresponding grade point 4.0 if a student can obtain 93-100% marks for NSU, and 90-100% marks for IUB, BRACU and UIU. Although DIU has "A+" letter grade with the corresponding grade point 4.0, a student must obtain

Table 3: Status of public universities in compliance with the grading system recommended by the UGC (PCB, 2024a; UGC, 2024).

Sl. No.	Name of the University	Pharmacy education initiation year	Website	Following UGC grading system	Available programs	
					Bachelor of Pharmacy	Master of Pharmacy
1	University of Dhaka	1964	www.du.ac.bd	✓	✓	✓
2	Jahangirnagar University	1985	www.juniv.edu	✓	✓	✓
3	University of Rajshahi	1990	www.ru.ac.bd	✓	✓	✓
4	Khulna University	1997	www.ku.ac.bd	✓	✓	✓
5	Noakhali Science & Technology University	2006	www.nstu.edu.bd	✓	✓	✓
6	Jagannath University	2009	www.jnu.ac.bd	✓	✓	✓
7	Jessore University of Science & Technology	2010	www.just.edu.bd	✓	✓	✓
8	University of Chittagong	2012	www.cu.ac.bd	✓	✓	✓
9	Bangabandhu Sheikh Mujibur Rahman Science & Technology University	2012	www.bsmrstu.edu.bd	✓	✓	✓
10	Mawlana Bhashani Science & Technology University	2014	www.mbstu.ac.bd	✓	✓	N/A
11	Comilla University	2014	www.cou.ac.bd	✓	✓	✓
12	Pabna University of Science & Technology	2015	www.pust.ac.bd	✓	✓	N/A
13	Islamic University Kushtia	2018	www.iu.ac.bd	✓	✓	N/A

Table 4: Status of private universities in compliance with the grading system recommended by the UGC (PCB, 2024b; UGC, 2024)

Sl. No.	Name of the University	Pharmacy education initiation year	Website	Complied (✓) or not complied (X) with with UGC grading	Available programs	
					B. Pharm.	M. Pharm.
1	University of Science & Technology Chittagong	1994	www.ustc.edu.bd	✓	✓	✓
2	University of Asia Pacific	1996	www.uap-bd.edu	✓	✓	✓
3	Gono University	1998	www.gonouniversity.edu.bd	✓	✓	✓
4	University of Development Alternative	2002	www.uoda.edu.bd	✓	✓	✓
5	East West University	2003	www.ewubd.edu	✓	✓	✓
6	Manarat International University	2003	www.manarat.ac.bd	✓	✓	N/A
7	Northern University Bangladesh	2003	www.nub.ac.bd	✓	✓	N/A
8	Primeasia University	2003	www.primeasia.edu.bd	✓	✓	✓
9	Southeast University	2003	www.seu.ac.bd	✓	✓	✓
10	Stamford University Bangladesh	2004	www.stamforduniversity.edu.bd	✓	✓	✓
11	State University of Bangladesh (SUB)	2004	https://www.sub.ac.bd	✓	✓	✓
12	World University of Bangladesh	2004	www.wub.edu.bd	✓	✓	N/A
13	Atish Dipankar University of Science & Technology	2005	www.adust.edu.bd	✓	✓	✓
14	North South University	2005	http://surl.li/clfrep	X	✓	✓
15	Daffodil International University	2005	www.daffodilvarsity.edu.bd	✓	✓	✓
16	BGC Trust University Bangladesh	2006	www.bgctub.ac.bd	✓	✓	N/A
17	Dhaka International University	2006	http://surl.li/ikbbek	X	✓	N/A
18	International Islamic University Chittagong	2006	www.iiuc.ac.bd	✓	✓	N/A
19	Southern University Bangladesh	2006	www.southern.edu.bd	✓	✓	N/A
20	Bangladesh University	2007	www.bu.edu.bd	✓	✓	N/A
21	BRAC University	2010	http://surl.li/ruxdaj	X	✓	N/A
22	ASA University Bangladesh	2011	www.asaub.edu.bd	✓	✓	N/A
23	Khwaja Yunus Ali University	2014	www.kyau.edu.bd	✓	✓	N/A
24	R. P. Shaha University	2014	www.rpsu.ac.bd	✓	✓	N/A
25	University of Information Technology & Sciences	2014	www.uits.edu.bd	✓	✓	N/A
26	City University	2015	www.cityuniversity.edu.bd	✓	✓	N/A
27	Varendra University	2017	www.vu.edu.bd	✓	✓	N/A
28	Independent University, Bangladesh	2017	https://shorturl.at/drCKp	X	✓	N/A
29	Eastern University	2003	www.easternuni.edu.bd	✓	✓	N/A
30	United International University	2023	http://surl.li/bikedb	X	✓	N/A

NA: Not applicable; The actual weblink of NSU, DIU, BRACU, IUB and UIU have made shorter because of space constraints in table.

Table 5: Grading systems of the private universities not following the uniform grading system recommended by the UGC and comparison of the deviation of grading from the UGC grading

SL. No.	University Name	Letter Grade												
		A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
1	North South University	-	93-100 (4.00)	90-92 (3.70)	87-89 (3.30)	83-86 (3.00)	80-82 (2.70)	77-79 (2.30)	73-76 (2.00)	70-72 (1.70)	67-69 (1.30)	60-66 (1.00)	-	< 60 (0.00)
2	Independent University, Bangladesh	-	90-100 (4.00)	85-90 (3.70)	80-85 (3.30)	75-80 (3.00)	70-75 (2.70)	65-70 (2.30)	60-65 (2.00)	55-60 (1.70)	50-55 (1.30)	45-50 (1.00)	-	<45 (0.00)
3	Dhaka International University	85-100 (4.00)	80-84 (3.75)	-	75-79 (3.50)	70-74 (3.25)	-	65-69 (3.00)	60-64 (2.75)	-	55-59 (2.25)	45-54 (2.25)	-	< 45 (0.00)
4	BRAC University	-	90-100 (4.00)	85-<90 (3.7)	80-<85 (3.3)	75-<80 (3.0)	70-<75 (2.7)	65-<70 (2.3)	60-<65 (2.0)	57-<60 (1.70)	55-<57 (1.3)	52-<55 (1.0)	50-<52 (0.7)	< 50 (0.0)
5	United International University	-	90-100 (4.00)	86-89 (3.67)	82-85 (3.33)	78-81 (3.00)	74-77 (2.67)	70-73 (2.33)	66-69 (2.00)	62-65 (1.67)	58-61 (1.33)	55-57 (1.00)	-	<55 (0.00)

85-100% marks to secure the “A+” or GPA 4.0 according the grading system of DIU. Close observation of the different grading of these five universities noticed that these gradings are highly tough and discriminating for the students and work as constraints to get better CGPA. For example, NSU students have to obtain at least 93% marks to obtain the letter grade “A” with the corresponding grade point 4.00. Another observation on NSU grading system is that the grade point has drastically fallen with a small difference of marks. For example, 93% marks required for grade point 4.0 while 90-92% marks can obtain grade point 3.70. Another important feature of the grading systems of those universities is that all these five grading systems are uniquely different by one from another. In general, the grade point of these five private universities is very low compared to the grading system recommended by UGC. For example, in order to obtain grade point 2.7 a student of NSU, IUB and BRACU must obtain 80-82%, 70-75% and 70-<75% marks, respectively. This is a poor grading score spending high marks compared to UGC grading system in which those marks would be sufficient to obtain a grade point 3.5 - 4.0. In practice, the pharmaceutical companies and other employers require a CGPA/grade point 3.5 to qualify the eligibility to call for interview. This condition is quite comfortable for the graduates who passed with the UGC grading system but it is very much tough for the students of those five private universities because only for the differences in grading systems. The marks that are required to obtain the grade point “B” is sufficient to obtain a grade point “A” by the student from public universities or other private universities except those five private universities. This is highly disgraceful for the students. NSU has no grade at 3.5 whereas 3.5 is pretend to be a minimum CGPA for the employers, especially at the academic institutions.

There is another important observation about the upper and lower limit of the grading system. In UGC recommended grading, the highest marks to obtain the highest-grade “A+” is 80-100, but for NSU, IUB, BRACU

and UIU, the highest letter grade is “A” and it starts from 90-100. This situation creates a huge problem for the graduates who are seeking jobs and it discriminates a lot among the graduate pharmacists passing from those universities with that of the students who are graduated from other private and public universities following UGC grading systems.

Another major discrimination is with the lowest pass mark of the students. According to UGC grading system, the minimum pass mark is 40%. UGC has set this minimum mark for the lowest grade “D” against 40 marks which is logically very acceptable. In contrary, NSU, IUB, DIU, BRACU, UIU have set the minimum pass marks to be 60, 45, 45, 52 and 55, respectively, which are much higher than that of UGC grading system. The above mentioned five universities have set their lower value of pass mark which itself is much higher than the pass marks of UGC recommendation grading system. The worst situation is observed in case of NSU where a student must need to obtain 60% marks just for pass with lowest letter grade “D” with the corresponding grade point only “1”. Higher education experts also think that the current practice of few private universities for the letter grades with the percentage of marks are quite high and should be revised to give more students to achieve better letter grades (Hassan, 2018). According to UGC grading system, 55-55 is graded as “B-” with grade point 2.75; the same number in case of NSU is defined as the failed “F” for the student. This is irrational in the same country which suffers a lot for the students mentally and intellectually because of the major discrimination of grading among the pharmacy graduates. Graduates from aforementioned universities may also face difficulties seeking admission in foreign universities for higher studies because of this unusual grading system. Students may not be allowed or may got rejected for admission and scholarships for higher studies because of their lower CGPA or do not get the desired program to study. This phenomenon causes great impact on their mental health as the graduates suffer from inferiority complex because of this ununiform grading system.

According to Indian grading system, the pass mark is 40-49.9%; that is, the minimum pass mark is 40% and the grade is “P” (GSI, 2024). Similarly, as per the grading system of Pakistan formed by Higher Education Council of Pakistan, the pass mark in university grading system is 33-44% with the corresponding letter grade “D” (HEC, 2008). On the contrary, the United States universities follow the higher grading system which requires high marks to pass a student. The grading system follows highest grade “A” and grade point 4.0 with 94-100% marks, while the lowest grade is “D-” and grade point 0.67 with 60.0-62.99% marks (USU, 2024).

Grades are mostly used for competitive evaluation for scholarships, admission into degree, graduate programs and for entering into a competitive job market (HEC, 2008). Therefore, the grading of all the educational institutions in a country should be the same to avoid the discrimination of the grading score of the graduates. In this study we found that the uniform grading system with the same CGPA with its letter grade and mark scale is not followed by all the private universities in Bangladesh in spite of the urged from the UGC of Bangladesh. All the public universities follow the UGC recommended grading system (grade scale, marks and letter grade) but the private universities follow a distinct grade standard set up by themselves ignoring the guideline of UGC. Another study carried out on the CGPA in the education system of Bangladesh previously reported the similar findings on the overall grading system in the universities (Alam et al., 2022).

East West University (one private university in Bangladesh) in 2023 has adopted the UGC recommended grading system abolishing their previous own grading system understanding the grading discrimination of their graduates (Karim and Hossain, 2014; EWU, 2024). This is a good task done by EWU authority to keep the harmony of country’s grading system and they could understand the problem of sporadic grading system and adopted new grading the system following UGC guideline.

The diversified grading systems practiced by some private universities with the variation of letter grades and percentile of marks generate confusion, problems and dissatisfaction among the Pharmacy students, its graduate, employers and policymakers as well as interrupting the implementation of uniform quality education in Bangladesh.

Conclusion and future direction

Our study observed that among all the public and private universities offering Pharmacy education, only five universities named North South University, Independent University Bangladesh, Dhaka International University, BRAC University and United International University grading systems are not in compliance with the UGC recommended grading system. These five universities are following their own and independent grading systems. However, all the public and the rest of the private universities are following the UGC grading system. In principle, all the universities, irrespective of public or private, should follow a uniform grading system throughout the country to ensure that all the graduates are evaluated with same grade scale and equal parameter. Ununiform grading policies are creating chaotic situation in the job market of Bangladesh. This is

creating subtle discrimination among the graduates. All the universities should follow a uniform grading system. This discrimination must be stopped. To remove the dissatisfaction among the graduates we recommend that (i) the universities must follow a uniform grading system recommended by the University Grants Commission, (ii) the UGC must play the key role for the compulsory implementation of UGC grading system strictly for all the public and private universities and (iii) UGC should monitor it to ensure the uniform grading system and harmony in the evaluation of graduates.

The present form of the UGC grading system is convenient to the graduates as well as to the employers. However, if required, the new grading system should be formulated that would be acceptable to all the private and public universities, convenient to the students to achieve better grades, uniform to the employers to evaluate the applicants at the same platform for screening the candidates for their jobs as well as the grading system would be internationally accepted.

Data Availability Statement

Data relevant to the study is already included to the article. Raw data will be provided on reasonable request upon contacting to the corresponding author.

Authors Contributions

Conceptualization, research design, data collection, data analysis, data interpretation and project supervision and critical review of manuscript were performed by MMRS. LH collected data and wrote the manuscript draft. SJ and JA collected data. MSA critically reviewed the manuscript. All the authors read and approved the manuscript to publish it.

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