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Implications of Student Debt on Financial Wellness: Can Universities Help?

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“Implications of Student Debt on Financial Wellness: Can Universities Help?”

Presented to the College of Pharmacy and Health Sciences

and

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In Partial Fulfillment

of the Requirements for Graduation Honors

Anne Elizabeth Leighty

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ABSTRACT

Introduction. Exploring whether or not students feel prepared financially for graduation is a useful exercise for universities as the results can provide ways to better support their students as they move into life after graduation. Financial wellness plays a role in a person's overall wellness and happiness. This could be of particular concern for pharmacy students due to increasing cost of education and typically, a minimum of six years of education is required. If universities implemented better ways to educate their students on student loans and financial well-being, new graduates could have decreased financial anxiety, as well as improved overall wellness.

Methods. This study was conducted via online survey using Qualtrics. Pharmacy students at Butler University were asked questions relating to the amount of stress they experience due to their finances and access to financial information, then rated their responses on a 5-point Likert scale.

Results. There were 107 complete responses from P1-P4 pharmacy students enrolled at Butler University. Results indicated 69.1% (n=74) students agreed or strongly agreed with the statement, "I feel anxious about my financial situation" and 84.1% (n=74) of students agreed or strongly agreed with the statement, "I want to learn more about what to do with my loans after college." When comparing anxiety and desire for financial information, there was a 0.276 positive correlation between anxiety and desire for financial information (p=0.004).

Conclusion. Financial anxiety is correlated with desire for financial information in college students with debt. Students feel like they would benefit by having more access to financial planning resolving student loans.

BACKGROUND

Student loan debt is a growing concern for current college students as well as those looking to attend college all across the United States. These concerns are having an impact on both students and college graduates regardless of their discipline and have even caught the attention of government officials.¹ Mounting student debt goes beyond inducing anxiety and has been shown to affect the quality of life for those involved as evidenced by factors such as delayed ability to purchase a home. Pharmacy students are no exception, especially when student debt for this entry-level degree is not only at an all-time high, but is significantly higher than the debt of classmates earning a bachelor's degree. This is due to increased fees often charged for professional programs, additional tuition expenses when students exceed 4 years of undergraduate tuition and increase to graduate tuition despite not receiving an undergraduate degree, and a two to four year longer average time required for progression to degree. Based on the AACCP 2017 National Summary Report, 86% of pharmacy students borrowed money to help pay for expenses.² As might be expected, those graduating in 2017 from public schools reported borrowing an average amount of \$136,328, compared with those graduating from private schools, who reported borrowing an average \$189,317.² This is a significant amount of debt to repay without appropriate knowledge of how to properly manage finances.

The number of pharmacy schools grew significantly in recent years to accommodate a perceived pharmacist shortage in the 1990's and early 2000.³ The previous estimate by the US Bureau of Labor Statistics of 25% occupational

growth by 2020 has slowed to only 3% growth from 2014-2024.⁴ This is below the 7% national average growth rate for all other professions.⁴ Current pharmacy students may find themselves accumulating a burdensome debt for their education, but not receiving quite the same return on investment as their colleagues did five years ago. This mismatch could lead to difficulty and significant stress when paying back student loans.

In addition to increased pharmacy school costs paired with slowed demand for pharmacists, students lack the personal finance skills to navigate a successful path out of their precarious financial situation. Most students are aware this is a problem. A recent survey said that 84% of undergraduate students want more education on financial management topics.⁵ It is not solely student loan debt that college students are facing with little financial preparation; credit card debt is another factor plaguing many young people. Even though low-interest student loans can be used to purchase necessities, such as room and board, 50% of undergraduates still had four or more credit cards due to their cost of living being greater than what can be secured through a student loan.⁵ Loaned money may seem like a great solution for students concerned about their eminent standard of living, but they may lack the ability to understand the consequences of those decisions later in life. A study by Sallie Mae found that 68% of college students charged items to their credit card knowing they do not have the funds to repay it.⁵ Two of the most reported financial stressors among college students are in direct opposition to one another: not having enough money to participate in the same activities as their peers and expecting to have

higher amounts of student loan debt at graduation.⁸ Educating students on the implications of financial decisions and appropriate budgeting could help alleviate some of the burden associated with accumulating student debt.

An additional concern for pharmacy students, in a time when they are seeking post-graduate education in growing numbers, is that the government does not mandate loan forbearance for pharmacy residency or fellowship programs.⁶ This type of financial relief is only allotted to medical and dentistry internship or residency programs.⁶ This leaves new pharmacy graduates in residency or fellowship programs suffering with the burden of on-time loan repayment despite only making approximately one-third of their expected income when they obtained the loans. While you can repay your federal loans on an income-based scale, private loans and credit card debt rarely offer this flexibility. This can have undue negative influence on a student's chosen career path resulting in students believing they cannot afford the reduced income associated with post-graduate education.

Even pharmacy students, who forego postgraduate education, may still struggle with student debt. It is easy to assume that large amounts of student loan debt is less significant due to higher average salaries for pharmacists, but this is not always the case. In 2014, pharmacists with five or fewer years of experience reported still maintaining an average of \$76,791 in student loan debt after graduating with an average of \$108,407 in debt.⁷ This is a much larger amount of debt carried by pharmacists after 5 years in the workforce when compared to professionals in other fields. Although most pharmacists in the 2014 study paid off an average of \$30,000 in five years or less, graduate pharmacist

debt is significantly higher than what it was in 2014. The 2016 AACP Graduating Student Survey reported an average of \$163,494 in debt upon graduation for pharmacists.² This \$60,000 increase in average debt from 2014 to 2016 significantly increases the financial burden for pharmacy professionals. This will lead to more payments over a longer period of time. Debt, like lower socio-economic standing, has been shown to have detrimental effects on mental and physical health, and can impact students' lives for years after they have graduated.

Financial wellness as a contributing factor to overall wellness for an individual has also been linked to academic performance.⁹ Overall student wellness remains an important topic on college campuses nationwide as stress and the incidence of depression among college students climbs at an alarming rate.⁸ A 2012 report by Inceptia, a non-profit financial education advocate, found that four out of the top five stressors for college students involved problems related to personal finances.⁸ Creating curricular requirements or at least offering more opportunities to further personal finance awareness could benefit students at universities all across the country. Pharmacy students' overall wellness may have an increased benefit due to their larger financial burden post-graduation and the longer time required for loan re-payment.

A recent study was published in September of 2017 looking at 147 pharmacy students' attitude towards debt, stress, and student loans. Among 133 students with federal loans in this study, 84% borrowed more than \$100,000 in student loans, with approximately 20 of these individuals exceeding \$200,000 in loans.¹⁰ This study looked at "fear of debt" and found a positive correlation that

indicated students with greater “fear of debt” had higher estimated loans.¹⁰ This study assumed that students with higher levels of debt are concerned, anxious, or fearful at the anticipation of repaying loans. They used this assumption to explain the correlation between the “fear of debt” and student loan amounts. This study discussed programming that improves knowledge concerning debt and ability to manage debt, such as education on student loans, financial aid counseling, education on personal finance, and professional financial planning. Their conclusion included the idea that financial proficiency programming throughout their college education may benefit students as they plan on how to finance their pharmacy school expenses and pay those expenses accordingly.¹⁰

NEED FOR THE STUDY

With student loan debt growing, the cost of pharmacy school increasing, and the pharmacist job market slowing, pharmacy students need to be more financially aware to improve their financial outlook and overall long-term financial wellness. Exploring the anxiety associated with lack of financial preparedness for graduation is something that universities could use to evaluate different ways to educate and help their students. The question for pharmacy schools is how to ensure their students have the proper financial acumen to manage their college debt. With an increased cost of education comes increased financial burden upon graduation. Financial wellness has shown to play a role in a person’s overall happiness. If universities could better educate and prepare students prior to graduation, new graduates could have decreased financial anxiety and burden as well as improved overall wellness.

RESEARCH QUESTION

Do pharmacy students who experience anxiety related to their ability to repay debt upon graduation have the resources they need to successfully manage that debt?

STUDY OBJECTIVE

The objective of this study is to compare, at different points during their education, pharmacy students' perspectives related to financial anxiety and their need for financial preparation before graduation.

METHODS

Study Design and Data Source:

This is a cross-sectional survey of pharmacy students enrolled at Butler University in the College of Pharmacy and Health Sciences. Students were provided with survey questions regarding their current financial status, their thoughts on their own financial awareness, and whether or not they believe they would benefit from further financial planning information (See Appendix A). The survey took approximately 5 minutes to complete. Butler University has a higher debt rate upon graduation in comparison to other pharmacy schools in the state of Indiana. This increased debt will be beneficial for the purpose of this study since Butler University students may feel more financial strain and could benefit from more financial education opportunities in comparison to students from other institutions.

The survey allowed comparison of different debt amounts in various years of pharmacy school and the student's level of both anxiety and financial

preparedness related to managing that debt. It then examines students' level of awareness related to the resources for prevention of accumulated debt, which are available to them such as scholarships, federal aid, or other resources through the university's financial aid office. Utilization of these resources could prevent or delay students' use of more expensive private loans. Finally, the survey asked about credit card debt. The study assessed student understanding of how financial anxiety, debt, access to financial information, and available financial education contributes to overall debt burden. Financial anxiety is measured using a scale that was developed by adapting generalized anxiety disorder to one's financial situation.¹⁰ Responses for the access to financial information scale and financial anxiety scale will be rated on a 5-point Likert-type scale. All analyses were conducted using SPSS.

Participant Population:

Butler University students enrolled in the professional phase of a six-year pharmacy curriculum (years 3-6) who have access to a computer with Internet connection. The survey was provided to these students through email and student newsletters.

Inclusion Criteria:

Students who are enrolled in the College of Pharmacy and Health Sciences as pharmacy students in the professional phase of their education at Butler University.

Exclusion Criteria:

Students who are not enrolled in the College of Pharmacy and Health Sciences pharmacy program or are only in the pre-professional program at Butler University (first and second year students). This group was excluded because they will not have amassed the same amount of debt and would not have received the same training related to financial management compared to students in the professional phase.

Statistical Analysis:

Descriptive statistics were used to analyze the student demographics. Continuous data were described using mean and standard deviation (SD) for variables considered to be normally distributed. The Likert-type scale data was analyzed using Pearson two-tailed correlation. P-values of less than 0.01 were considered statistically significant.

The current survey explored variables affecting students' financial anxiety and desire for more information on managing finances and loans. Anxiety and desire for financial knowledge were the dependent variables, while debt, year in the pharmacy program, gender, and types of loans served as the independent variables. Missing data from the Likert-type scale was replaced with the median for each item. Data was summed from Section 2 independently and Section 3 independently of Table 2. See Table 2 for a complete list of responses and scale items. Once the items were summed from the financial anxiety scale, the range could be from 7 to 35 and students exemplified scores on both ends of the range. The mean score for this sample was 17.5 (SD=8.0). Once the items were summed, scores on the access to financial information scale could range from 9

to 45, but the range for this population was from 9 to 41. The mean score for this sample was 31.7 (SD=4.4). The average student respondent fell within the \$50,001-\$100,000 amount for overall debt, but most pharmacy students fell within the \$0-\$50,000 range of debt.

RESULTS

A total of 117 responses were received from P1-P4 students enrolled in the pharmacy program of Butler University's College of Pharmacy and Health Sciences. Of those 117 responses, 10 were incomplete, leaving 107 responses for statistical analysis. Of the 107 complete responses, 86% (n=92) of the respondents were female and 14% (n=15) of the respondents were male. Related to these students' anxiety levels, 69.1% (n=74) students agreed or strongly agreed with the statement, "I feel anxious about my financial situation." Most students are not experiencing physical symptoms of anxiety such as fatigue, tense muscles, or difficulty sleeping at this time, but 41.2% (n=44) of students agreed or strongly agreed that they have difficulty controlling their worry about finances. Another 28.9% (n=31) agreed or strongly agreed that they are irritable because of their financial situation. In regards to information about access to loan information, 84.1% (n=90) of students agreed or strongly agreed with the statement, "I want to learn more about what to do with my loans after college" and 79.5% (n=85) of students agreed or strongly agreed with the statement "I would like more information on student loans, loan forbearance, debt, and repaying loans." Most students (53.6%, n=58) said they are unaware of their different options for loan repayment after graduation. When comparing

anxiety and desire for financial information, there was a 0.276 positive correlation between anxiety and desire for financial information ($p=0.004$). Currently, only 18.7% ($n=20$) of students carry credit card debt for more than 30 days. A small percentage of students (6.8%, $n=11$) use credit cards to pay for their academic expenses. See Table 2 for a complete list of responses and scale items.

DISCUSSION

Butler University pharmacy students do want more information and education on loans and financial information regardless of their financial anxiety, year in school, or total loan debt. Although Butler University students are not currently experiencing some of the physical symptoms involved with financial anxiety, most are still experiencing anxiety and several of Butler's students are experiencing irritability and worry relating to student debt. Students stated they would benefit by having a designated person to ask financial aid questions. This advisor could be set up by the university at the beginning of the student's education and then follow-up on a semester-by-semester basis. This is a small step to connect students with a face who they know they can reach out to with financial concerns or questions.

There are also a significant amount of students experiencing regular anxiety regarding their financial situations. Some students are also experiencing irritability and worry about financial situation. Although not as many students are experiencing muscle tightness, fatigue, difficulty concentrating, or difficulty sleeping, there are still pharmacy students on Butler University's campus who are experiencing these physical symptoms of anxiety relating to their financial

situation. With debt increasing for students across the country and pharmacy schools increasing in cost, alleviating some of the anxiety associated with this financial burden is important since stress associated with debt can have long-term health consequences. Providing these students with resources or at least more complete information on a regular basis on where to find financial help could help decrease this burden throughout their academic experience at Butler University.

Although there were not many students who use credit card debt for financial expenses or students who carry that debt for more than 30 days, credit card interest and credit card debt can be debilitating long-term for students who are not aware of the different parameters of their specific credit card. It may be difficult to provide education on this topic specifically, but providing students with a general overview of credit cards, credit card debt, and repayment may allow students to make more educated financial decisions relating to credit cards. Evaluating the use of credit cards to college related expenses in the general population could help determine how many students this affects and if there is any added anxiety due to credit card use in college students.

This study is limited by its small sample size and that most of the respondents were female. This study is further limited due to the survey being self-administered and answers were self-reported. Actual numerical debt values could not be confirmed. The study population was also composed of mainly P4 students who may feel more anxious about their financial situation due to proximity of graduation. The sample size relating to students' year in school was

not equal so comparative statistics could not be run, however this would be something to look at in the future. Lastly, there are few students who transfer into Butler's pharmacy program, but they could alter the data due to their longer length of time in school, and therefore debt. Future studies could ask students to estimate an exact dollar amount on their debt so that multiple regression could be used to associate a linear correlation between increase in debt and therefore increased anxiety and increased desire for financial oriented information.

Since education costs are likely to increase in the foreseeable future and pharmacist's salaries are not increasing at the same rate, additional studies are needed to better assess the financial well-being of future pharmacists. Financial anxiety, access to financial information, and financial well-being should be evaluated in pharmacy students, recent graduates, and pharmacists further in their practice. These studies can be used to evaluate factors that predict and exacerbate stress as well as whether or not there are opportunities to change those factors to decrease long-term financial anxiety. Very few pharmacy programs require a financial planning course. Looking at the long-term financial and emotional well-being of those pharmacy graduates could help determine whether or not similar programs could have benefits at other schools of pharmacy. Education, counseling, and planning programs should be developed and then implemented, and evaluated by pharmacy schools to determine effects on anxiety related to financial well-being and if that changes with more access to financial oriented information. Finally, strategies that directly address the costs of

pharmacy school and improve cost-effectiveness for students should be explored to help limit the overall financial burden of attending pharmacy school.

CONCLUSION

Financial anxiety is correlated with desire for financial information in college students with debt. Students feel like they would benefit by having more access to financial planning information and student loan information. Students could use a designated person to ask financial questions or a class relating to financial planning. Further studies could determine the best ways to provide information to students on financial planning and look at ways to decrease overall costs of pharmacy school education.

Table 1. Baseline Characteristics

Section 1	n = 107	
Female	92 (86.0)	
Male	15 (14.0)	
Year in School		
P1	16 (15.0)	
P2	21 (19.6)	
P3	25 (23.4)	
P4	45 (42.0)	
Estimated amount of total debt		
\$0-50,000	39 (36.4)	
\$50,001-100000	34 (31.8)	
\$100001-150000	16 (15.0)	
\$150000+	15 (14.0)	
I don't know	3 (2.8)	
Question		
	Yes	No
Have you taken out student loans to pay for college?	85 (79.4)	22 (20.6)
Check all that apply		
What type of loans are you using to pay for college?		
Low Interest Loans	4 (2.5)	
Federal Student Loans	81 (50.0)	
Private Student Loans	43 (26.5)	
Student Loans from Friends and Family	23 (14.2)	
Credit Card Debt to Pay for Academic Expenses	11 (6.8)	
Question		
	Yes	No
Do you use credit cards on a regular basis to pay for things and carry that debt for more than 30 days?	20 (18.7)	87 (81.3)\$

Table 2. Survey Responses

Section 2	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I feel anxious about my financial situation	33 (30.8)	41 (38.3)	11 (10.3)	17 (15.9)	5 (4.7)
I have difficulty sleeping because of my financial situation	5 (4.7)	14 (13.1)	17 (15.9)	23 (21.5)	48 (44.9)
I have difficulty concentrating on my school/or work because of my financial situation	8 (7.5)	17 (15.9)	10 (9.3)	33 (30.8)	39 (36.4)
I am irritable because of my financial situation	10 (9.3)	21 (19.6)	17 (15.9)	26 (24.3)	33 (30.8)
I have difficulty controlling worry about my financial situation	16 (15.0)	28 (26.2)	6 (5.6)	25 (23.4)	32 (29.9)
My muscles feel tense because of worries about my financial situation	9 (8.4)	10 (9.3)	11 (10.3)	25 (23.4)	52 (48.6)
I feel fatigued because I worry about my financial situation	12 (11.2)	10 (9.3)	8 (7.5)	29 (27.1)	48 (44.9)
Section 3	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I want to learn more about what to do with my loans after college	39 (36.4)	51 (47.7)	8 (7.5)	5 (4.7)	4 (3.7)
I am aware of opportunities to defer my loans	5 (4.7)	38 (35.5)	11 (10.3)	45 (42.1)	8 (7.5)
I would like to know more about interest rates	21 (19.6)	54 (50.5)	20 (18.7)	10 (9.3)	2 (1.9)
I would benefit from having a designated person to ask personal finance questions	37 (34.6)	60 (56.1)	7 (6.5)	0 (0.0)	3 (2.8)
I would benefit from financial planning classes	38 (35.5)	62 (57.9)	1 (0.9)	4 (3.7)	2 (1.9)
I know the terms of my loans (approx. monthly payments, interest rate, due date, etc.)	12 (11.2)	36 (33.6)	14 (13.1)	37 (34.5)	8 (7.5)
I know who to ask if I have questions about my financial situation	8 (7.5)	38 (35.5)	16 (15.0)	36 (33.6)	9 (8.4)
I am aware of the different repayment plans	6 (5.6)	31 (29.0)	12 (11.2)	48 (44.9)	10 (9.3)
I would like more information on student loans, loan forbearance, debt, and repaying loans	28 (26.2)	57 (53.3)	16 (15.0)	3 (2.8)	3 (2.8)

APPENDIX A. Qualtrics Questions

Section 1

Please select your gender.

Male Female Prefer not to answer

How many years have you been in college or higher education prior to this year?

Fill in the blank

Do you have a previous degree?

Yes No

What year are you in pharmacy school?

P1

P2

P3

P4

Are you a part of the dual MBA program or have a major or minor related to business? (e.g. healthcare administration, accounting, marketing)

Yes No

Have you taken out student loans to pay for college?

Yes No

What types of loans are you using to pay for college? (Check all that apply)

Low Interest Federal Student Loans

Private Student Loans

Student Loans from Friends and Family

Credit Card Debt to pay for academic

expenses

I don't know

Please estimate the amount of total debt (federal student loans, other loans and credit card debt) you currently have.

\$0-\$50,000

\$50,001-\$100,000

\$100,001-\$150,000

\$150,000+

I don't know

Do you use credit cards on a regular basis to pay for things and carry that debt for more than 30 days?

Yes No

Section 2

	5-Strongly Agree	4-Agree	3- Neutral	2-Disagree	1-Strongly Disagree
I feel anxious about my financial situation					
I have difficulty sleeping because of my financial situation					
I have difficulty concentrating on my school/or work because of my financial situation					
I am irritable because of my financial situation					
I have difficulty controlling worry about my financial situation					
My muscles feel tense because of worries about my financial situation					
I feel fatigued because I worry about my financial situation					

Section 3

	5-Strongly Agree	4-Agree	3- Neutral	2-Disagree	1-Strongly Disagree
I want to learn more about what to do with my loans after college					
I am aware of opportunities to defer my loans					
I would like to know more about interest rates					
I would benefit from having a designated person to ask personal finance questions					
I would benefit from financial planning classes					
I know the terms of my loans (approx. monthly payments, interest rate, due date, etc.)					
I know who to ask if I have questions about my financial situation					
I am aware of the different repayment plans					
I would like more information on student loans, loan forbearance, debt, and repaying loans					

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