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Nurses' Knowledge of Eating Disorders

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NURSES' KNOWLEDGE OF EATING DISORDERS

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Abstract

Eating Disorders are a range of disorders marked by abnormal eating habits. These habits can often have a detrimental effect on the body and have the potential to complicate acute medical problems if they are a pre-existing condition. Due to this, it is important that members of the healthcare team be aware of the nature of these disorders from both a physical and mental health perspective in order to provide the best, most holistic care. In this study, individuals with nursing experience in acute medical and acute psychiatric care were asked 11 questions concerning the assessment and knowledge of eating disorders along with demographic information such as age, area of practice and years of experience. The results of this study showed the average score of the questions involving treatment (7-11) were higher than that of the assessment questions (1-6) and that years of practice experience had no correlation, positive or negative, to overall score. These findings are consistent with the literature that suggests that nurses could potentially benefit from additional education regarding their disorders and their unique presentation, as it can be inferred that years of practice alone does not determine competency in the area especially, according to this study, in terms of assessment and identification.

Introduction/Background

In recent years, eating disorders have become a prevalent medical condition. However, they still remain somewhat of a healthcare mystery. These disorders are not exclusive to any race, gender, age, or class and are defined as eating habits that have a negative effect on a person's health, both mental and physical. Due to the disorders' ambiguous nature, nurses in any area of healthcare can be faced with a patient who may be suffering from an eating disorder. Unfortunately, little research has been done that assesses the knowledge base of healthcare

professionals, especially nurses, in regards to eating disorders. In the interest of providing effective, quality care it is essential that nurses have the knowledge and tools necessary to assess these patients and identify their unique needs.

When diagnosing these disorders it is important to first rule out any other medical conditions that may be causing a change in eating patterns before proceeding to screen for disordered eating, which consists of both a physical and psychiatric exam. Each of these disorders has a unique set of signs and symptoms that can aid in their diagnoses. However it is important to note that it is possible for a patient to have one of these disorders without exhibiting common symptoms. Treatment for these conditions, in order to be effective, must be a multidisciplinary effort. It must focus not only on the symptoms and physical effects of these disorders, but also on any psychological issues that contribute to them as well. As it stands currently, treatment for eating disorders include inpatient facilities that provide more extensive care for those whose disorders have led to physical problems or are in any way life threatening, and outpatient therapy involving psychotherapy, nutritional counseling, and medications such as antidepressants. It is important to note that no drugs exist specifically or solely for the purpose of treating eating disorders (NIMH, 2014).

Patients who suffer from eating disorders present a unique and multi-factorial presentation when they are hospitalized for an acute illness or condition. When men and women are identified as eating disordered, usually in an acutely ill condition as a result of chronic starvation and lack of nutritional energy intake, they are usually admitted to a psychiatric or rehabilitative facility for interdisciplinary care. However, acute care nurses routinely encounter patients with one of these disorders as an antecedent to a chronic or acute physiological condition or illness. For example, a lack of proper nourishment can delay growth in children and adolescents, affect brain function,

slow metabolism, reduce bone density, and lower both heart rate and blood pressure (NEDA). Under these conditions, the body attempts to slow down to accommodate the reduced intake of food and energy. Conversely, binge eating disorders have an opposite effect on the body and are known to increase heart rate and blood pressure with a risk of heart disease and type 2 diabetes (Hall-Flavin). Those affected by eating disorders often suffer from secondary mental effects such as depression or thoughts of suicide or self-harm.

In this study the authors aim to examine the awareness of acute care nurses regarding the unique aspects of screening and assessment that they see who may be at risk for having an eating disorder by examining nurses' knowledge base. Current studies in nursing related to the assessment and treatment of eating disordered patients presenting for acute care is sparse and outdated. In this study the authors hope to pinpoint areas to target educational intervention programs for acute care nurses on the importance of screening for and managing patients who suffer from disordered eating, as this may contribute to a presenting acute condition, to ensure the best possible health outcomes

Review of Literature

Patients who are hospitalized for acute conditions very commonly have concurrent chronic illnesses that affect their clinical presentation in an acute condition which will complicate a complete assessment, formulation of definite diagnoses, and the management plan for the presenting problem (Valderas, et al 2009). The focus of this study is directed toward the identification and assessment, by nurses, of eating disorders, specifically anorexia and bulimia, in patients who are treated for acute illness. Those affected by eating disorders often suffer from secondary mental effects such as depression or thoughts of suicide or self-harm (NEDA).

Physiologically, a lack of proper nourishment can delay growth in children and adolescents, affect brain function, slow metabolism, reduce bone density, and lower both heart rate and blood pressure. Under these conditions, the body attempts to slow down to accommodate the reduced intake of food and energy, which in turn can put the patient at greater risk for more serious complications (NEDA). To better understand these illnesses, both healthcare professionals and the community must be involved. In this literature review, studies are examined that pertain to the current knowledge of healthcare providers and the evaluation of the status quo concerning these disorders.

To understand and combat eating disorders it is essential that physicians, nurses, and other healthcare providers understand the nature of these diseases and how to treat them. A study by Girz, Robinson, and Tessier found that medical residents reported feeling more comfortable with the assessment of these disorders than with their treatment and management (Girz, et al 2014). Those in this study reported receiving 5 hours of training or less about eating disorders during their time in medical school. In addition to their lack of instruction, the respondents also reported lower confidence scores in treatment than in assessment. This finding reinforces that providers require confidence in their treatment abilities, realizing their shortcomings. These results suggest that by improving educations and clinical experience, healthcare providers could improve their confidence in treating eating disorders and be more likely to do so.

Understanding eating disorders universally requires an examination of the true nature of these diseases as well as how they are perceived. How a nurse or physician perceives that a person will appear if they are suffering from an eating disorder plays a role in their determination of whether or not a patient is at risk. With the unique influence that society has on these diseases, it is possible that the depth to which they are pathological can be disputed. A study published in

the Journal of Eating Disorders in July of 2014 focused on the divergent perceptions of bulimia with a specific focus on whether it is truly a mental illness or rather a socially motivated compulsion (Churruca, Perz, Ussher, 2014). Participants were recruited based on their general knowledge of bulimia or, in a much smaller number, had personal experience with bulimia or bulimic behavior and were then asked to rank 42 statements regarding bulimia (Churruca, Perz, Ussher, 2014). The study revealed seven prevalent mindsets regarding the nature and perception of bulimia: "bulimia as uncontrolled behavior", "bulimia is a distressing mental illness", "bulimia is a way to lose weight", "self-medicating with food", "the pathological pursuit of thinness", "being the best at being thin", and "extreme behavior vs. mentally ill" (Churruca, Perz, Ussher, 2014). It is interesting to note that although some of these factors recognize a need for treatment (i.e. factors that categorized bulimia as a mental illness or an uncontrollable compulsion), others were less sympathetic and placed blame on the affected individual. This finding is yet another aspect of these diseases being rooted in societal constructs. The urge to 'fit in' is so great that these diseases may sometimes be disregarded as a vain attempt to become part of an idyllic 'in-crowd' (Callogero, et al, 2014). The researchers of this study concluded that although they reached seven diverse and definite statements regarding bulimia, overall participants did not provide a solid consensus on the nature of the condition. This diversity of opinion could have a significant effect on how those with bulimia see themselves and how they interact with others.

The difference in perceptions of behaviors associated with disordered eating (i.e. mental illness vs. vanity or societal pressure) has dangerous repercussions when present in medical and nursing care. Therefore it is imperative that healthcare providers have exposure to and are educated about these diseases to ensure the patient receives effective care. This will require

collaboration between physicians, nurses, families, and the community and will challenge researchers to increase their knowledge, involvement, and critical thinking skills. This last finding is of particular interest because it is similar to how these diseases are thought to arise in the first place: as a result of pressure or fear of judgment by the media or the community at-large. If after the disease develops patients face a societal stigma and curtail their behavior in order to prevent it, does this create a cycle that could create even more disorder? If so, providers must combat this destructive process as early as possible. This requires the provider to confront their own perceptions and knowledge of these diseases in order to perform as objective an assessment as possible.

Once providers have evaluated their own knowledge, the next step is to use this knowledge to improve their practice and patient care. A study performed by Carter, et al examined the introduction of a nurse with specialized experience with eating disorders (ED-RN) to a general inpatient pediatrics unit. Initially, the nurses on the floor did not see the benefits of having a specialist on the floor to aid with care of patients with these disorders, although when asked they reported that caring for these patients themselves was frustrating and often unsatisfying. The findings of this study revealed that a model where both an RN and an ED-RN collaborate on the care of a patient with an eating disorder produce better outcomes and more satisfying therapeutic relationships—whereas the two nurses on their own had weaknesses that prevented the delivery of the most effective care: The ED-RN lacking peer support and the RN lacking knowledge of the disorders themselves (Carter, et al 2012).

While the Carter study supports the idea that patients with eating disorders benefit from having a provider experienced in the nature of their condition, is it possible that it would be more beneficial to have this care being performed by any member of the nursing staff? On many units

it may not be feasible to have a specialist due to staffing issues, time commitments, cost, etc. In these cases it would be more beneficial for the RNs that are already on the unit and caring for patients to have sufficient knowledge to provide quality care.

Nursing Concept

When a patient with a chronic eating disorder enters an acute care setting they present unique challenges. In order to meet these challenges so that patients to receive effective and quality care it is imperative that healthcare providers have a sound knowledge base and are aware of their own perceptions pertaining to these disorders. For nurses, this involves decision making and advocacy for the patient that will be optimally effective given their pre-existing conditions. Because the researchers will be directly assessing the knowledge of nurses, the concept being utilized in this study is the nurse.

Purpose and Aims

The Purpose of this study is to assess the knowledge base surrounding eating disorders in acute care nurses

Aim 1

To examine awareness among acute care nurses about eating disorders and the severity of these conditions

Aim 2

To assess the knowledge of nurses regarding the assessment/identification of eating disorders

Aim 3

To explore the literature for interventions to increase both knowledge and awareness of eating disorders in the nursing community

Methods

The literature review for this study was conducted using the East Tennessee State University Sherrod Library online database. Search terms that were applied include but are not limited to: 'eating disorders + nurses', 'eating disorder identification and treatment', and 'eating disorder knowledge base'. The time frame selected for articles in this database was 2000-2015.

Design

This is a descriptive study on nursing knowledge of need to assess for disordered eating in patients who are being treated for acute health issues, and what to look for/assess. The methodology is quantitative, using an online survey developed from a study done in 2014 by Girz, et al. on medical students working with children and adolescents as to their working knowledge of disordered eating patterns and how they affect management of pediatric disease and acute illness. Certain items in the original instrument were modified due to the difference in population being identified. The original instrument contained 8 additional questions concerning diagnosis of these disorders; these were omitted due to the inability of nurses to diagnose these conditions.

Population

Recruitment of eligible nurses was done via email to members of the East Tennessee State University College of Nursing's Graduate Programs. The sample included students in the following graduate programs: MSN, Ph. D, DNP. In order to be eligible for the survey, nurses must have had experience in one or more of the following acute care areas: 1. acute medical care (on the floor, ICU, ED or PACU); 2. In an acute psychiatric facility OR 3. Both. Waivers of consent and recruitment emails with this information were sent to potential subjects.

Instruments

This study was conducted using an online questionnaire consisting of 11 survey questions adapted from a study by Girz, et al. (2014)

Question	Answer Choices	
If you eat 3 meals per day and don't purge you're not likely to have an eating disorder.	True	**False**
Individuals with bulimia nervosa always purge by vomiting or using laxatives.	True	**False**
Individuals with anorexia nervosa do not binge or purge.	True	**False**
Adolescents with anorexia nervosa typically look underweight.	True	**False**
The majority of adolescents with eating disorders come from dysfunctional families.	True	**False**
You cannot disclose an eating disorder diagnosis to a parent if the child disagrees.	True	**False**
Parents cannot be seen as the solution in the treatment of eating until ways in which they have caused it have been properly explored.	True	**False**
It is not always advisable for parents to get tough with a child with an eating disorder because he/she will experience too much trauma and distress.	True	**False**
While parents are important, children with eating disorders will never get better until they receive some sort of individual therapy themselves.	True	**False**
It is more the parent's responsibility than the child's to bring their child to recovery from an eating disorder.	**True**	False
Adolescents need at least some motivation to be able to receive treatment.	True	**False**

Data collection and analysis

Quantitative data was collected through an online survey. The results were analyzed by statisticians within the College of Nursing and the results were recorded and interpreted by the authors. No personal information was collected from participants. All participants' confidentiality has been respected and kept. A consent document was attached to the recruitment email containing details about the survey, the researchers, and the measures being taken to ensure confidentiality. All data gathered during the survey was stored on a password protected account only accessible to the researchers. No personal or identifying information was collected; thereby the researchers were not able to identify the respondents. Before the collection of data, three (3) hypotheses were proposed by the researchers

(1) Results would be similar to those of the original study wherein the average score for assessment questions (1-6) would be higher than the average score for treatment questions (7-11)
(2) Nurses with experience working in an acute psychiatric facility or with pediatric patients (0-18) would receive higher overall scores than those without
(3) Nurses with more practice experience would receive higher scores.

Results

At the end of the survey, 42 individuals had participated: 37 female, 4 male, and one who did not identify their gender. Participant ages ranged from 18 to 55+ with half considering the geographical area where they practice to be a rural setting.

What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	37	88.1	88.1	88.1
	Male	4	9.5	9.5	97.6
	Prefer not to answer	1	2.4	2.4	100.0
	Total	42	100.0	100.0	

Would you consider the area you practice in to be a rural setting?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	50.0	51.2	51.2
	Yes	20	47.6	48.8	100.0
	Total	41	97.6	100.0	
Missing		1	2.4		
Total		42	100.0		

What is your age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	2	4.8	4.8	4.8
	25-34	19	45.2	45.2	50.0
	35-44	10	23.8	23.8	73.8
	45-54	10	23.8	23.8	97.6
	55 or above	1	2.4	2.4	100.0
	Total	42	100.0	100.0	

The majority of our participants had practice experience in an Acute Medical setting with very few who work(ed) in an Acute Psychiatric facility, which in turn did not provide the researchers with enough data to draw conclusions regarding the comparison of overall scores between the two. This was also the case when attempting to compare scores of those with experience with pediatric patients and those without.

In which of these patient care areas are you currently practicing or have practiced in the past?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Acute Medical Care (on the floor. ICU. ED. PACU)	37	88.1	88.1	88.1
	Acute Psychiatric Facility	3	7.1	7.1	95.2
	Both	2	4.8	4.8	100.0
	Total	42	100.0	100.0	

What age group of patients do you typically care for?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-18	4	9.5	9.5	9.5
	18-55	21	50.0	50.0	59.5
	55 and above	17	40.5	40.5	100.0
	Total	42	100.0	100.0	

When comparing scores on assessment questions (1-6) versus scores on treatment questions (7-11) there was a significant difference between the averages, with the average score for treatment being higher than that of assessment. This is the opposite of what occurred in the original study: the medical residents surveyed had a significantly higher average score on the assessment questions.

Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
Score for question 1-6	Q1-6	42	1.8810	1.43480	.22139
	Q7-11	42	3.5952	1.01356	.15639

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Score for question 1-6	Equal variances assumed	3.548	.063	-6.324	82	.000	-1.71429	.27106	-2.25352	-1.17506
	Equal variances not assumed			-6.324	73.761	.000	-1.71429	.27106	-2.25442	-1.17415

When looking at participants' years of experience in their care area and their scores, there was no significant data found that suggests a positive or negative correlation between the two: more experience did not consistently result in better scores, and less experience did not consistently result in lower scores.

Total Score * How many years have you practiced in this patient care area(s)? Cross tabulation

Count

		How many years have you practiced in this patient care area(s)?																
		1	10	11	12	13	16	2	23	3	32	4	5	6	7	8	9	Total
Total Score	2	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	4
	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	4	0	1	0	0	1	1	1	0	0	0	0	1	2	0	1	0	8
	5	1	2	2	1	0	0	0	0	0	0	0	0	0	1	1	0	8
	6	0	1	1	0	0	0	1	1	1	1	2	1	0	0	0	0	9
	7	0	0	0	0	0	0	0	0	0	0	1	1	3	0	0	1	6
	8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
	9	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	3
Total		1	6	4	2	2	1	3	1	2	1	3	3	7	2	2	2	42

Discussion

Conclusions

Hypothesis 1 postulated that the results of this study would be consistent with the original study in which participants scored higher on assessment questions than treatment questions. This was shown to be false by the higher average score on the treatment questions (7-11).

Hypothesis 2, which suggested that nurses with psychiatric or pediatric experience would attain higher scores was thrown out due to an insufficient population sample and was therefore not proven.

Hypothesis 3 regarding nurses with more experience in practice attaining higher scores was also shown to be false, as there was no correlation found between years of experience and scores, positive or negative.

The higher scores on treatment questions suggest that while nurses may know how to treat these disorders, they may not be able to identify them upon assessment. It may be necessary for nurses to receive additional education regarding the presentation of these conditions.

There was no difference found between experienced nurses and those less experienced in the amount of knowledge these nurses had in treating eating disorders. This suggests that one's individual exposure to and experience with these diseases plays a larger role than experience overall, further supporting the position that additional education can be beneficial.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
TotalScore	42	2	9	5.48	1.890
First 6 questions	42	0	5	1.88	1.435
Last 5 questions	42	0	5	3.60	1.014
Valid N (listwise)	42				

It is worth noting that while there is a significantly higher score in the area of treatment, the mean score for the questionnaire was only 5.48, with a maximum score of 9. In addition, the mean score for the treatment questions was only 3.60 out of 6 questions. These scores also support the need for additional education in this area, as there may be deficiencies even in those who scored better in one area or the other.

Implications for Further Study

If further study in this area is pursued, it is the recommendation of the researchers that the validity and reliability of the tool utilized in this study be tested with nurses or another population for which it was not originally intended. Extended study of this instrument could in turn aid in the creation of a research tool specifically designed to assess nurses. While the tool adapted from the Girz study does produce results, they are not completely satisfactory nor do they give us an accurate picture of nurses' knowledge. The omission of the preliminary questions from the original questionnaire involving diagnosis of these conditions also eliminated questions regarding providers' confidence levels regarding treating patients with eating disorders. If a tool for nurses were to be developed, questions assessing their confidence level could provide valuable information that may provide insight into participant's individual scores. In addition to questions regarding assessment and treatment, a new tool would benefit from the addition of questions concerning how eating disorders can affect acute care as a preexisting condition.

Limitations

The research instrument used was originally designed for medical residents, therefore the instrument had to be slightly augmented to fit the current population. The instrument also had a focus on a pediatric patient population, which may have provided an unfair advantage or disadvantage to participants, but furthers the case for a comprehensive instrument for nurses.

Generalizations about the nursing profession as a whole cannot be made due to the fact that a convenience sample was used, there was no control group, and participants consisted only of graduate nursing students at East Tennessee State University. In addition, the study only included participants with practice experience in either acute medical or acute psychiatric settings. Because the sample was limited to RNs studying in the College of Nursing at ETSU, our sample size was low. Recruiting subjects from other areas around the county, state, etc. and having the opportunity to send out the survey to them several times to provide reminders may yield a more diverse sample and better results.

Summary

This study found that knowledge of eating disorders amongst the nurses in the sample is not dependent on overall nursing experience and that, while they have greater knowledge regarding treatment, there is room for improvement regarding both the assessment and treatment of these conditions. In order to improve this knowledge nurses should be provided with education opportunities specific to these disorders, such as seminars or other continuing education programs. It may also be beneficial to have additional education on eating disorders during nursing school outside of the mental health units so that individuals can be introduced to

the idea of these disorders in relation to physical health and plans of care early in their education and careers.

References

Calogero, R., Carra, G., & Dakanalis, A. (2014). The developmental effects of media-ideal internalization and self-objectification processes on adolescents' negative body-feelings, dietary restraint, and binge eating. *European Child & Adult Psychiatry*.

Carter, N., Webb, C., Findlay, S., Grant, C., & Blyderveen, S. V. (2012). The Integration of a Specialized Eating Disorders Nurse on a General Inpatient Pediatric Unit. Journal of Pediatric Nursing, 27(5), 549-556. doi:10.1016/j.pedn.2011.06.014

Churruca, K., Perz, J., & Ussher, J. (2014). Uncontrollable behavior or mental illness? Exploring constructions of bulimia using Q methodology. Journal of Eating Disorders.

Girz, L., Robinson, A., & Tessier, C. (2014). Is the next generation of physicians adequately prepared to diagnose and treat eating disorders in children and adolescents? Eating Disorders: The Journal of Treatment & Prevention, 22(5), 375-385.

Hall-Flavin, D. K. (n.d.). Binge-eating disorder: Symptoms and Causes. Retrieved from http://www.mayoclinic.org/diseases-conditions/binge-eating-disorder/symptoms-causes/dxc-20182932

National Eating Disorders Association. (n.d.). Health Consequences of Eating Disorders. Retrieved from http://www.nationaleatingdisorders.org/health-consequences-eating-disorders

National Institute of Mental Health. (2014). Eating Disorders: About More than Food. Retrieved from https://www.nimh.nih.gov/health/publications/eating-disorders-new-trifold/eating-disorders-pdf_148810.pdf

Valderas, J. M., Starfield, B., Sibbald, B., Salisbury, C., & Roland, M. (2009). Defining Comorbidity: Implications for Understanding Health and Health Services. The Annals of Family Medicine, 7(4), 357-363.