

College of Health Professions Interdisciplinary Case Study Workshop 2010

Introduction

Welcome to the 11th Annual College of Health Professions Student Interdisciplinary Case Study Workshop. This year the workshop will be held on Wednesday, November 3, 2010 from 8:00am-12:15pm (Continental Breakfast served from 8:00-8:30 am) in the Chesapeake Rooms of the Towson University Union.

The Case Study Workshop is designed to provide senior and graduate students in the College of Health Professions the opportunity to interact with peers from a variety of different disciplinary perspectives while considering critical issues raised by the complexity of a real-world scenario.

If you would like to participate in the Case Study Workshop, *your must register online*. Walk-ins will not be accepted on the day of the event. *Therefore you must complete the online registration process by 2:00pm on Wednesday, October 27, 2010.*

Workshop Schedule

8:00-8:30 am Registration	Registration/Continental Breakfast
8:30 am	Welcome; Greetings & Acknowledgements and Opening Remarks
8:45-9:00 am	Invited Speaker
9:15- 9:45 am	Unidisciplinary Groups/Discussion Questions (First Table Assignment)
9:45-10:00 am	Break (<i>move to Interdisciplinary Group, Second Table Assignment</i>)
10:00-11:00 am	Interdisciplinary Groups/Discussion Questions
11:00am-12:00pm	Wrap-up
12:00pm-12:15pm	Evaluations & Certificates

Workshop Objectives

Following this workshop, the student will demonstrate the ability to:

1. Identify the potential benefits of interdisciplinary collaboration.
2. Identify major issues from the perspective of the student's own discipline regarding the provision and management of services for the Case Study family.
3. Identify major education, health care, and community issues confronting the Case Study family and the interdisciplinary team members.
4. Collaborate with an interdisciplinary group to prioritize and develop strategies for addressing the health care, education, and community issues of the Case Study family.
5. Provide rationale for the prioritization of the health care, education, and community issues of the Case Study family.
6. Identify and discuss the challenges and benefits of interdisciplinary collaboration:
 - a. in meeting the needs of the Case Study family.
 - b. in finding solutions to problems within the health care, community, and education systems.

The Case Study :

Section 1

Hi, my name is Sam and I am a 21-year-old college junior. My twin sister, Sarah, and I have done everything together our entire lives. We have lived in adjacent buildings since our Freshman year. The only difference between the two of us is that she is athletic (she is on the cheerleading squad) and I am not. I am excited about beginning a career in architecture. I've looked forward to graduation and I should be happy and enthusiastic about all of my achievements to date and the beginning of the next phase of my life. That all changed, however, when I saw my sister fall from a stunt during a football game...

My sister, Sarah, is a bubbly outgoing girl. She loves challenges and enjoys the outdoors. Sarah is completing a work-study program through campus recreation services. She is a regular face at the climbing facilities on campus, she loves leading outdoor adventure expeditions and teaches several group fitness classes per week. Last year she ran two marathons and plans to run the NYC marathon by the time she graduates. She is studying to be a health educator. She enjoys working with people and believes that success in life comes from education. She also likes shopping and hanging out with her friends, when she isn't working, studying or training with the cheerleading squad.

On Saturday September 12, 2009, Sarah was cheering on the Vikings for their first home game when the unthinkable happened! She was in the middle of a stunt when she fell flat on her back onto the track. The athletic trainers raced over to her while the paramedics were called. She had a laceration to her right temple and lay there unresponsive. I met the paramedics at the hospital and called Mom and Dad while I was on the way. They live about 5 hours from campus which would make for a long and emotionally exhausting night.

The doctor informed me that it would take a few days to realize the extent of the injuries. The doctors explained that she had some internal bleeding, some head trauma, and a broken back and wrist. I called and gave my parents regular updates. My parents arrived just after midnight – Sarah was awake and stable but confused and in pain.

Thankfully, Sarah became more alert over the next 2 days, but she was still in really bad shape and the extent of her broken back had to be assessed as well. She had limited movement from the waist down and she just didn't seem like herself. She was confused and irritable. The physicians and specialists seem to come and go. They were always performing a new test and reporting new findings to my parents. Fortunately, the social worker assigned to Sarah's case was able to guide us through the medical system, without her I am not sure my parents would have known what to do while Sarah was in the hospital. Now after 3 months, she can get around with assistance and her thinking seems clearer but she is not the same person she was before the accident. She tends to be very sad and does not get involved with any of the "activities" that the hospital has for inpatients. Sarah no longer initiates contact with her friends

or family. We used to talk all the time, now she barely looks at me. Sometimes she asks me how life is going on campus, but when I give her updates on things she quickly changes the subject or tells me she wants to rest. I think she resents me in a way. She has also started complaining that she is not sleeping at night, has trouble remembering things, and is easily distracted.

Sarah was moved to a rehabilitation center once her injuries were stable. At the same time she was moved the bills began to arrive. My mom couldn't figure out why they owed so much money and why so many claims were being denied or partially accepted. My mom is an office manager at a doctor's office and therefore felt like she would be able to at least understand the insurance aspects of Sarah's case. However she is unsure now whether Sarah has maxed out on her insurance coverage and that may be why claims are being denied. This added a new element of stress on the family, especially considering my Dad was laid off 3 weeks ago. The members of the rehabilitation team are planning to send her home and, ultimately back to college, but there was a strong difference in opinion among the members of the team as to whether she should go back to school or go to a special outpatient treatment center and postpone college for at least another semester. Our family is confused about what is best for Sarah. They are unsure too about whether insurance will cover Sarah's treatment in the specialized facility. I think Sarah wants to return to school but I'm worried about whether she can really handle it – there are so many new challenges for her and what consumed her leisure time (cheerleading) will no longer be there. Plus, what about her job with campus recreation? It's more than just a job to her; being physically active, and helping others to do the same, is a big part of who she is. I am so scared for her and my parents. She has been in a totally sheltered environment with maximum structure. How is she going to be able to make it at college...on her own? Will my parents be able to help her during this transition? What will her peers think? I know that she can't stay in a facility forever... I also heard one of the rehabilitation staff say that she could benefit from a longer stay but that it is not possible because of the managed care system. It's scary to think that my family will have to figure it all out.

Fortunately, Sarah's family doesn't have to "figure it all out" alone. The interdisciplinary team at the rehabilitation facility will have to make recommendations and appropriate referrals to assure that Sarah's needs are met. She was assigned a Nurse manager who will help Sarah and her family transition from the rehabilitation hospital. Resources in the health care system as well as at the college may be available, however, insurance coverage is limited and the university only provides services related to educational needs. Your job, as a member of the interdisciplinary team will be to determine what the needs are and how they will be met.

Section 2

Patient: Sarah Walker
DOB: February 12, 1988
Date of Onset: September 12, 2009
Date of Report: November 2, 2009

Current Medical Status:

Medical Diagnosis: (as of November 2, 2009)

1. Traumatic brain injury secondary to fall
2. Motor deficit: Limited weight bearing on lower extremities, mild deficits in coordination and balance
3. Status upper extremity: Full range of motion of upper extremities; complete union of radius, and ulna; mild deficits in strength, coordination, reaction time
4. Post-traumatic generalized seizures
5. Post concussion syndrome including:
 - a. Cognitive communication deficits: impulsivity and mild deficits in executive function, memory
 - b. Persistent headaches
6. Auditory Processing Disorder
7. Major Depression

Medical Course:

Previously healthy active young adult. History of ruptured appendix, May 24, 1999 – hospitalized X 6 days – triple antibiotic therapy. The fall to her back resulted in a T11 –T12 compression fracture and a grade 3 concussion. As a consequence of the concussion, Sarah was diagnosed with a traumatic brain injury (TBI). Since the accident Sarah has lost 12 pounds and a significant amount of muscle tone. During her initial stay in the hospital she developed a stage IV decubitus ulcer on the sacral area, just above the buttocks, secondary to poor nutrition and immobility. Subsequently, the ulcer became infected and Sarah was placed on Vancomycin, 600 mg IV every 12 hours for 6 weeks. The ulcer was debrided and a wound vac placed for several weeks. The wound vac has been discontinued for three weeks and she now receives wet – to dry dressing changes BID. Sarah’s mother is active in her care and reminds Sarah to change position frequently. Discharge planning includes home care nursing twice a week for wound assessment. As a result of long term antibiotics, Sarah has developed C-diff which has caused further irritation to her wound. All of this has caused her to become very despondent. The family insisted on Sarah seeing a psychologist for a depression screening; she was subsequently diagnosed with major depression.

Social History:

Currently lives at home with her parents. Twin brother, Sam, is still attending Western University (5 hours away from home). Sarah has taken a medical leave of absence from Western University. She currently has junior standing and a GPA of 3.42. She was a cheerleader and was active in recreational activities – marathons, aerobics, rock climbing, and cross training.

Interdisciplinary Case Conference Summary

Medical:

Current medical treatments include:

Dressing changes twice a day using saline soaked dressings covered by dry gauze.

Pain management

Physical Therapy to increase strength to lower extremities

Occupational therapy for wrist fracture and ADLs

Speech-language pathology services to increase cognitive-linguistic skills

Auditory Training to improve processing of auditory stimuli

Psychiatric counseling for depression

Nutritionist

Current Medication:

Phenytoin 300 mg po daily – seizure control

Celexa 20 mg po daily - depression

Metronidazole 500 mg po QID – c-diff

Percocet 7.5 mg/500 mg every 6 hrs as needed (not to exceed 8 tablets per day) – severe pain

Ibuprofen 800 mg po every 6 hours as needed – mild to moderate pain

Multivitamin 1 tablet daily

Current Labs:

CBC				Chemistry			
	Result	Units	Reference		Result	Units	Reference
WBC	15.3*	Thou/cumm	4.0 – 11.0	Na	136	mEq/L	133 - 145
Neutro	8800*	µL	1700 – 8100	K+	4.1	mEq/L	3.3 – 5.1
EOS	355	µL	0.0 – 450	Cl	98	mEq/L	96 – 108
Basos	195	µL	0.0 – 200	CO2	26	mEq/L	22 - 29
Lymphs	4850*	µL	1000 - 4800	Calcium	8.3	Mg/dL	8.4 – 10.2
Monos	16*	µL	200 – 950	BUN	22	Mg/dL	6 - 23
Platelets	354	150 - 450	Thou/cumm	Creatinine	10	mEq/L	0.4 - 11
RBC	5.2	Mil/cumm	4.2 – 5.9	Glucose	105	Mg/dL	67 – 133
Hct	37*	%	38 – 47				
Hgb	13	G/dL	12.5 – 15				
MCV	87	Cu micron	77 – 103				
MCHC	34.4	32 – 36.7	%	C-reactive protein	1.3*	Mg/dL	< 0.5
MCH	31	27 – 32	Pictogram				
Coag Studies							
PT	12.7	Sec	11.8 – 14.2				
PTT	30.2	Sec	24.9 – 34.5				
Fibrinogen	365	Mg/dL	193 - 475				

* indicates abnormal value

Nutrition: Sarah is 5'6" and currently weighs 112 pounds. Prior to falling, Sarah weighed 125 pounds. Most of her weight loss has been in the form of muscle. Her body composition has changed drastically since the day of her falling event. Her muscles have atrophied to the point that it is significantly recognizable upon looking at her. Sarah's clothing is not fitting the way it was before. In fact, Sarah's parents have had to purchase new clothing for her to wear during her rehabilitation stay. Sarah, whom once had a very healthy appetite, no longer shows the same interest in food. This is even the case regarding some of her "favorites" that her family brings in from home. The family is concerned that further deterioration in her nutritional status will compromise Sarah's ability to recover in a timely manner. They have spoken to the hospital staff about getting recommendations on improving her dietary intake.

Activities of Daily Living – Self-Care/ Safety Awareness:

Sarah can perform self-care activities of eating, grooming, oral hygiene and upper body dressing with verbal cues to initiate and set-up of all supplies. She requires minimal assistance for toileting, bathing and lower body dressing. Sarah cannot complete her self-care routine without built in rest breaks and requires close supervision secondary to problems with balance and safety concerns.

Motor Skills:

Sarah's healed wrist fracture needs rehabilitation to achieve full ROM and maximal strength. Bilaterally, she requires rehabilitation secondary to decreased endurance and strength, and decreased fine motor skills needed to complete all ADLs. Her rehabilitation must address standing balance and endurance.

Ambulation:

Sarah is scheduled to work daily with physical therapy on strength building exercises and ambulation. There have been times when Sarah has been non-compliant with her therapy. She has been good about being diligent and engaged with all of her scheduled physical therapy sessions. However, when her therapists have given her exercises to complete on her own during the times that she is not working one-on-one with them, she has neglected to complete these assignments with a level of consistency. Now that the conversations have turned towards transitioning back to home/college, she has been speaking with an Exercise Physiologist on the rehabilitation team mostly for the purposes of formulating a plan for maintenance once she is discharged. Sarah has indicated to the E.P. that she would love to be able to do the physical activities that she used to do, but she has a number of reservations and fears regarding all of the work she has ahead of her.

Cognition/ Speech-Language:

Although Sarah is awake and able to carry on conversations, she is frustrated by her inability to complete complex tasks similar to her academic tasks. She has functional recall of her own personal history and past events but mild difficulty recalling day to day events. She is able to attend to basic tasks and conversations but requires redirection when completing reading and writing tasks. She is most successful at completing tasks without distractions. In noise, Sarah

has difficulty completing routine cognitive tasks and following multiple step directions. Her response time is delayed and she requires repetition of orally presented information. Mild deficits are noted with executive functioning including planning, organization and self monitoring.

Hearing:

Sarah has peripheral hearing within normal limits, bilaterally. Tympanometry revealed normal, Type A, tympanograms. Acoustic reflex thresholds were present within normal limits, bilaterally. Speech recognition thresholds (SRTs) were present at expected levels and consistent with pure tone averages. Word recognition testing, in quiet, revealed scores of 96%, in both ears at 40 dB SL. Despite these test results indicating hearing within normal limits Sarah was often confused by directions given to her by hospital personnel, had difficulty understanding in group therapy, and was often withdrawn in the cafeteria. Therefore her audiologist decided to assess her for Auditory Processing Disorder (APD).

Results from the APD assessment indicated a diagnosis of APD (failure on 2+ tests by more than 2 Standard Deviations). Auditory Processing Disorder is not a hearing loss but a disorder related to how a person processes auditory stimuli and is specific to the auditory modality.

Behavior/social skills: Sarah is more introverted than normal. She is easily frustrated and has less initiative to complete activities of daily living. Her thinking seems slow and she needs visitors to repeat information frequently. She requires encouragement to participate in recreational activities in rehab. She prefers to remain in her room resting.

Psychological status:

An extensive psychological exam was performed by Dr Shue. After a complete review of Sarah's medical records and completion of a Depression screening, she was diagnosed with Major Depressive Disorder. She was then started on a selective serotonin reuptake inhibitor and referred to a counseling center that specializes in treatment for young adults with disabilities.

Issues to Consider:

1. Ability to resume her previous activities (within her dorm, at university, in the community)
2. Environmental supports (home, university, community)
3. Environmental barriers (home, university, community)
4. Interdisciplinary health and education issues
 - Individual
 - Family
 - University/ Community