

# The Power of the Internet in Students Learning

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# **Barry University**

#### **Disclosure**

- Presenter Indra Hershorin PhD, RN, CNE
- Learner Objectives:
- 1. The learner will be able to discuss how the Internet impact nursing students learning in the classroom.
- The learner will be able to develop an eHealth wiki assignment for nursing students.

There is no conflict of interest with my employer Barry University.

# The "Millennial Generation" of College Students

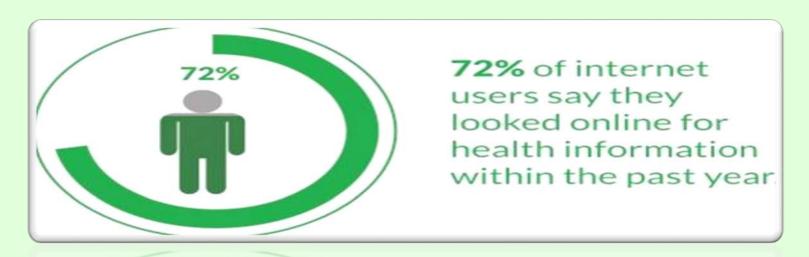
- The millennials are between 20 and 35 years old and they haven't lived a day of life without the internet.
- College students in the healthcare professions have unprecedented access to the internet.



# The Internet and Health care



- 8 out of 10 Internet users look online for health information.
- Next to checking email and using search engines it is the third most popular Web activity.



## Technology in the Classroom

- From overhead projectors to digital projectors.
- Technology plays a critical role in teaching and learning.
- The Internet makes obtaining, processing, and understanding health information a critical competency area for nursing students.



# Why Internet Assignments in the Classroom?

- Helps to prepare students for the electronic workplace (Stephens-Lee & Wilson, 2013).
- The internet is a valuable tool for providing students with information about health related topic (Robb, & Shellenbarger, 2014).
- Nurses as well as nursing students need to be knowledgeable about online health information (Hallila, Zubaidi, Ghamdi, & Alexander, 2014).
- Consider learner characteristics of the millennial generation.

## Millennials, Technology, and Teamwork

Computers are NOT technology (Frand, 2000).

Computers and the Internet are an assumed part of life.



Staying connected is essential.

Smart phones and computers ensure millennials remain connected anyplace and anytime.

- Technology has increased levels of interconnection among millennials.
- Team-Oriented (Howe & Strauss, 2007).

Students expect team teaching, team assignments, and team grading.

## Purpose of the eHealth Assignment

- Faculty should consider incorporating learning activities that help students develop the skills, knowledge, and confidence to locate and evaluate information on the internet (Robb, & Shellenbarger, 2014).
- The purpose of the assignment was to provide students with opportunities for accessing electronic health (eHealth) information and sharing of the information or resources in the classroom.

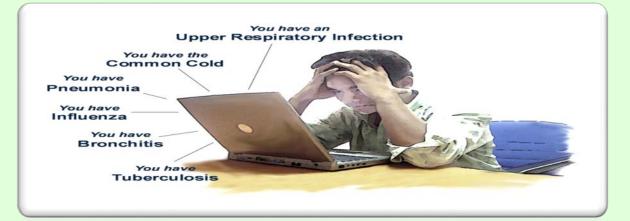
## **eHealth**



- eHealth emerged early in the 21<sup>st</sup> century.
- Electronic information and communication technology.
- Provide valuable information on disease conditions, health assessment, treatment options, preventive measures.

The digital patient is tech-savvy and look for health information

online.



#### Method

- Students were required to conduct an online search and select an article related to the topic assigned.
- Build a wiki page on the course management system.
- Rubric provided.
- Presentation in class.
- The CRAPP Test to evaluate information from the Internet.

#### The CRAAP Test

- Evaluating Information Applying the CRAAP Test
   Meriam Library California State University, Chico
- Currency
- Relevance
- Authority
- Accuracy
- Purpose

## **Participants**



- Convenience sample.
- 30 students enrolled in an undergraduate nursing course.
- 87% less than 30 years of age.
- Students were assigned to one of eight groups.
- Each group had 3 or 4 students.

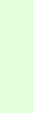
### **Article Selection**



- Conditions seen in clinical
- Personal health.
- Wanted to know more about the topic.
- Know a child with the diagnosis.

### Students Wiki

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Title: Recurrent Risk of Febrile Seizures in Children

#### Introduction

Febrile seizures are common amongst children. They can present as simple or complex febrile seizures. Febrile seizures occur due to a high temperature in the body. A simple febrile seizure is characterized as a generalized seizure lasting no longer than 15 minutes and does not happen again within the 24 hours. One of the differences between simple febrile seizure and complex febrile seizure is that with simple febrile seizure there are no neurological abnormalities unlike complex febrile seizure. Complex febrile seizure is prolonged, focal and happen to occur again within the 24 hours. In some cases, febrile seizure can reoccur. The main focus of this study was to identify what are the risk factor that cause the febrile seizure to recur.



#### Method:

This was a descriptive prospective study conducted over a period of one year, from January 2014 to December 2014 at Department of Paediatrics and Adolescent medicine, BPKIHS. Children from the age of 6 months to 6 years were included and those who had afebrile seizures, on regular anticonvulsants treatment and who refused to give consent were excluded. The parents of children were interviewed during admission by asking certain screening questions. Complete physical, developmental and neurologic assessments were conducted on each of the children. On arrival

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Why we chose this article? As a group we found this article interesting. Febrile seizures in children are very common. Knowing the risk factors of febrile seizures and what can cause them to reoccur is important information to know. Seziures in general is an amazing topic to expand ones knowledge. What causes seizures, the process of having a seizure, what to do/not to do and the medications given to those having a seizure is crucial information. This article was sensational.

Article Link: Link

Febrile Seizures in Children.pdf



#### References:

(Ed.). (2015, April). The Epilepsies and Seizures: Hope Through Research. Retrieved November 14, 2017, from https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Hope-Through-Research/Epilepsies-and-Seizures-Hope-Through (Links to an external site.)Links to an external site.

Status epilepticus. (2012). Retrieved November 14, 2017, from

https://www.marshfieldclinic.org/specialties/neurosciences/status-epilepticus (Links to an external site.)Links to an external site.

Agrawal J, Poudel P, Shah G, Yadav S, Chaudhary S, Kafle S. Recurrence Risk of Febrile Seizures in Children. *Journal Of Nepal Health Research Council* [serial online]. September 2016;14(34):192-196. Available from: MEDLINE Complete, Ipswich, MA. Accessed November 24,

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### **Students WIKI**



#### Diabetic Ketoacidosis in Infants, Children, and Adolescents

Diabetic ketoacidosis is a serious complication of diabetes that occurs when your body produces high levels of blood acids called ketones. The condition develops when your body can't produce enough insulin. Insulin normally plays a key role in helping sugar (glucose) — a major source of energy for your muscles and other tissues — enter your cells. Without enough insulin, your body begins to break down fat as fuel. This process produces a buildup of acids in the bloodstream called ketones, eventually leading to diabetic ketoacidosis if unfreated.





**Article Description** 

#### Diabetic Ketoacidosis in Infants, Children, and Adolescents

Diabetic Ketoacidosis (DKA) is potentially a life threatening complication caused by insufficient amounts of insulin resulting in hyperglycemia (>200 mg/dll), osmotic diuresis, electrolyte loss, dehydration, decreased giomerular filtration (further compounding hyperglycemia), and hyperpsmolarity.

The clinical manifestations are polyturia, polydipsia, signs of dehydration, such as; reduced skin turgor; dry mucous membranes; tachycardia; capillary refill s3 second; sunken eyes deep; weak or impelpable peripheral pulses; hypotension; shock; and oliguria, sighing respirations to reduce pCO<sub>2</sub> and buffer acidosis, and progressive leading to coma.

The younger the child, the more difficult it is to obtain the classical history of polyuria, polydipsia, and weight loss and lead to middlagnoss of pneumonia, asthma, or bronchitis. The severity of DKA is defined by the degree of acidosis: mild, venous pH 7.2–7.3; moderate, pH 7.1–7.2; and severe, pH <7.1. Assess for infection, weight loss, dehydration, dehydration, level of consciousness, ketonuria, and electrolyte (potassium and phosphate).

Treatment: In the unconscious or severely obtunded patient, secure the airway and empty the stormach by continuous nasogastric suction to prevent pulmonary aspiration; continuous electrocardiographic (ECG) monitoring to assess T waves for evidence of hyper- or hypokalemia and monitor for arrhythmias and administer potassium if hypokalemia; give oxygen to patients with severe circulatory impairment or shock; give antibiotics to febrile patients after obtaining appropriate cultures of body fluids; catheterization if the child is unconscious or unable to void on demand; hydrate patient with isotoric normal saline or lactate Ringers; administer phosphate to treat hypophosphate and stop phosphate if hypocalcaemia; and administer insulin. The change to subcutaneous insulin should occur when ketoacidosis has resolved (serum bicerbonate ≥18 mEq/l and venous pH >7.3), plasma glucose is <200 mg/dl, and oral intake is tolerated.







Link - Diabetic Ketoacidosis in Infants, Children, and Adolescents- Website

Link - Diabetic Ketoacidosis in Infants, Children, and Adolescents- PDF

Video

Diabetic Ketoacidosis Misdiagnosis and Untreated: Rocco's Story

#### **Evaluation**

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
(1)	(2)	(3)	(4)	(5)

- End of semester 5-item Questionnaire.
- The eHealth Report assignment helped me with learning more about the topic.

- The online format for the eHealth Report assignment was easy to use.

- The eHealth Report assignment adds to my skills, knowledge, and confidence in locating and evaluating information from the internet

- The group assignment allowed for collaboration, teamwork, and sharing of information.
- **•** 5

- I would recommend the eHealth Report assignment for future nursing students
- 5

# **Findings**



- 100 % of students reported that the eHealth assignment allowed for creativity, collaboration, and teamwork.
- 100% of the students communicated that the assignment added to their skills, confidence in locating, and evaluating information from the Internet.
- 97% of the students found the assignment helpful in learning about the concepts.
- 100% of the students found the online format easy to use.
- 100% of students would recommend the eHealth assignment for future students.

# **Implications**

- Millennials enjoy group assignment. They are team oriented.
- They are tech savvy and use technology to connect with a greater number of people, more frequently, and in real time.
- The development of the eHealth Wiki report allowed for creativity, collaboration, and teamwork.





#### Conclusion



- The Internet is a valuable tool used by students to provide them with important information on healthcare related topics that may ultimately impact their practices as Registered Nurses.
- Using digital technologies such as wikis in the classroom and online search for healthcare information empowers students to take an active role in their learning allowing them to gain a deeper understanding of the concepts.

#### References

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## Questions

