11-2016

Name Game: How to Best Display Nursing Credentials

Terry A. Kessler
Valparaiso University, terry.kessler@valpo.edu

Elise M. Alverson
Valparaiso University

Recommended Citation
Kessler, T.A., and Alverson, E.M. (2016). Name game: How to best display nursing credentials. The Bulletin: Indiana Nurses Foundation, 43(1), 5.

THE BULLETIN

Volume 43, No. 1

Brought to you by the Indiana Nurses Foundation (INF) and the Indiana State Nurses Association (ISNA) whose dues paying members make it possible to advocate for nurses and nursing at the state and federal level.
Quarterly publication direct mailed to approximately 106,000 RNs licensed in Indiana.

Nov, Dec 2016, Jan 2017

Message from the President

Patient Engagement—So Many Questions…Do You Have the Answers?

Are you engaged? No, not engaged to be married. But, are you engaged with your patients, your profession and your community? As a nurse, you do not exist in isolation; neither do your patients or your peers. *To "nurse," is to "care for."* This implies at the minimum a 2 person interaction. To maximize the impact of the interaction, it mandates a 2 way engagement or connection. Are you engaged? Is your patient engaged? Have you taken the time and energy to assess your patient's knowledge base? Is your patient not just listening, but processing what you are sharing? Is there eye contact? Are you reading the patient's non-verbal cues? Again, are you truly engaged with your patient? Is your patient engaged with you? Are they at a coping point with their medical condition to be engaged? Well, just what can be done to enhance patient engagement?

Techniques to enhance patient engagement are not complex, but even simple interventions take time, energy and flexibility that are frequently at a minimum in the nurse's busy daily schedule. Techniques that readily come to mind are: getting down to the patient's eye level, eye contact, touch, speaking slowly, asking the patient to restate what you've said, repeatedly going over the instructions, asking the patient to demonstrate, calling the patient post-discharge and providing written instructions. All are simple, but all take time. Time is not always available in today's healthcare environment.

This leads us to the question of whether our current health care delivery model enhances or inhibits patient engagement. For example, a patient having a minor outpatient procedure within a 3 hour period will interact potentially with four different RNs and multiple other healthcare providers. Considering the stress of the procedure, the unfamiliar environment and the multiple providers, is it realistic to expect true patient engagement let alone the retention of discharge instructions? Is it past time to explore alternative delivery models?

By staying engaged in the profession of nursing, one stays current on how his/her peers are addressing patient care challenges. Research findings presented at conferences and in journals can readily be critiqued and incorporated into practice. Professional forums allow for joint problem solving. Nurses should always be open for evidence based practice improvements. All nurses should have a continual inquiry mindset and approach to their practice.

Being engaged in the community enables the nurse to know and utilize the resources available to enhance his/her patient's care. Community engagement enables the RN to impact population health. What are the resources within a 5 mile or a 10 mile radius of your community or your patient's community? To name a few: Is public transportation available? What are the local diabetes resources? How readily available is OT/PT? What smoking cessation programs are within your county? What can you as a lone RN do to impact the population health of your neighbors? Better yet, what can we (the collective we of 100,000 Indiana licensed RNs) do to improve population health in our state?

Become engaged with your patients, your profession and your community!

Non-Profit Org.
U.S. Postage Paid
Princeton, MN
Permit No. 14

current resident or

Certification Corner

My Journey to Certification

Sue Johnson

I first thought about attaining professional certification while I was working in the acute psychiatric care setting in 2013. I had been a nurse for 2 years and was encouraged by my manager and educator to reach for this milestone. I have been fortunate to work for an organization that not only encourages certification as a professional goal; but also offered small study groups to help prepare for the exam. Several educators, our medical director and even some local professors were all so willing to help us learn. I was so nervous to take the exam that I would not even tell my manager when it was scheduled. However, I could not wait to turn in my passing results for the Psychiatric-Mental Health Nursing certification that was offered by the ANCC.

As I continued to grow throughout the next three years, I returned to school for my MSN and transitioned into a new role as a nurse in the emergency department. My experience and certification in mental health has been invaluable in navigating many patient situations in the emergency setting. However, I made a professional promise to myself and my patients that I would become certified in emergency nursing as well. With some experience under my belt, I felt more confident studying for this exam on my own; and, I achieved Certification in Emergency Nursing from the BCEN in July 2016.

One of my leaders told me that "certification is not simply some letters to put behind your name or a bump in pay at work; but rather an investment for continued growth in knowledge and practice that ensures delivery of the best quality care that you can provide." I will always remember this throughout my career, wherever it may lead me.

Lauren M. Quandt, BSN, RN-BC, CEN

Thanks, Lauren, for sharing your experience and your leader's comment with us. Your experience truly exemplifies how certification ensures that patients receive the best professional nursing care! Hopefully other nurses will follow you into certification!

Do you want to share your certification story with your colleagues? It may encourage them to join you! Please contact me at SueJohn126@comcast.net to share your experiences!

THE BULLETIN

An official publication of the Indiana Nurses Foundation and the Indiana State Nurses Association, 2915 North High School Road, Indianapolis, IN 46224-2969. Tel: 317/299-4575. Fax: 317/297-3525. E-mail: info@indiananurses.org. Web site: www.indiananurses.org

Materials may not be reproduced without written permission from the Editor. Views stated may not necessarily represent those of the Indiana Nurses Foundation or the Indiana State Nurses Association.

ISNA Mission Statement

ISNA works through its members to promote and influence quality nursing and health care.

ISNA accomplishes its mission through unity, advocacy, professionalism, and leadership.

ISNA is a multi-purpose professional association serving registered nurses since 1903.

ISNA is a constituent member of the American Nurses Association.

Address Change

The INF Bulletin obtains its mailing list from the Indiana Board of Nursing. Send your address changes to the Indiana Board of Nursing.

Bulletin Copy Deadline Dates

All ISNA members are encouraged to submit material for publication that is of interest to nurses. The material will be reviewed and may be edited for publication. To submit an article mail to The Bulletin, 2915 North High School Road, Indianapolis, IN. 46224-2969 or E-mail to info@indiananurses.org.

The Bulletin is published quarterly every February, May, August and November. Copy deadline is December 15 for publication in the February/March/April *The Bulletin*; March 15 for May/June/July publication; June 15 for August/September/October, and September 15 for November/December/January.

If you wish additional information or have questions, please contact ISNA headquarters.

For advertising rates and information, please contact Arthur L. Davis Publishing Agency, Inc., 517 Washington Street, PO Box 216, Cedar Falls, Iowa 50613, (800) 626-4081, sales@aldpub.com. ISNA and the Arthur L. Davis Publishing Agency, Inc. reserve the right to reject any advertisement. Responsibility for errors in advertising is limited to corrections in the next issue or refund of price of advertisement.

Acceptance of advertising does not imply endorsement or approval by the Indiana Nurses Foundation of products advertised, the advertisers, or the claims made. Rejection of an advertisement does not imply a product offered for advertising is without merit, or that the manufacturer lacks integrity, or that this association disapproves of the product or its use. ISNA and the Arthur L. Davis Publishing Agency, Inc. shall not be held liable for any consequences resulting from purchase or use of an advertiser's product. Articles appearing in this publication express the opinions of the authors; they do not necessarily reflect views of the staff, board, or membership of ISNA or those of the national or local associations.

www.indiananurses.org

Published by:
Arthur L. Davis Publishing Agency, Inc.

Indiana Nurses Foundation

Beads & Bucks

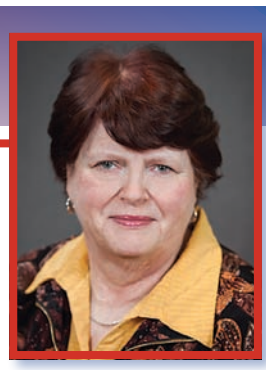
Michael Fights RN, MBA, MSN – INF President

During the ISNA annual convention held in Kokomo, IU campus, the Indiana Nurses Foundation (INF) held a fundraiser: The Bead Game. For those that attended and participated, it was a fun filled spectacle. 707 strands of beads were sold ($1 per strand) prior to the event. Half of the money, $363.50, went to the winner of the game. The rest of the proceeds went directly to the INF to support nursing research in our state. For those nurses who conduct or want to conduct nursing research and want to be considered to receive a research grant, please go to here on the ISNA website (www.indiananurses.org): About Us > Indiana Nurses Foundation and fill out the application: Research Grant Criteria and Application.

If you want to contribute to the foundation or know a benefactor who is interested in supporting nursing research in Indiana, please direct them to the ISNA web site, INF Donations or call ISNA (317-299-4575) to speak with an ISNA official to make arrangements for receiving funds.

Thank you to everyone who was able to participate in the Bead Game and to past and present benefactors that have generously and faithfully supported nursing activities in Indiana.

CEO Note



Indiana Nurses Crafting Indiana Nursing

Not long ago ISNA held our annual Convention in Kokomo, at the IU Kokomo campus. I would like to thank Dr. Linda Wallace for hosting and making us feel so welcome. I would also like to thank Dr. Angie Heckman for making it happen. For the first time in a very long, long time the convention sold out. We had to tell nurses that we could not let them attend. That was heart breaking. More than 200 nurses and nursing students came together to hear the latest in Indiana nursing and to discuss the future of Indiana nursing. Every voice was welcomed and heard. Next year the venue will be larger so we can include more nurses and students.

As we the nursing community move into the future, ISNA is working to make that future the reality that Indiana nurses craft. All voices are needed, including yours so get involved by participating in your professional organization, ISNA. The law makers, lawyers, farmers, business men and women are getting ready to look at scopes of practice, do you want to be involved? Do you want nursing scopes to be changed with or without the advice of nurses? Do you want to practice at the level of your education and training? Have you thought about it? Today is the day to start working on the future. I look forward to hearing from you, if you are not a member join and get involved. If you are a member get involved. You can reach me at gingy@IndianaNurses.org

Next year's Convention will revolve around Healthy Nurse/Healthy Nation, I hope to see you there.

ISNA Welcomes Our New and Reinstated Members

Crystal Adams	Seymour, IN	Catherine Decker	Hartford City, IN	Amanda Hayes	Spencer, IN
Erin Adams	Fort Wayne, IN	Susan DeCrane	West Lafayette, IN	Amy Heim	Velpen, IN
Angela Asoera	South Bend, IN	Catherine Delnat	West Terre Haute, IN	Gina Hendershot	Russiaville, IN
Alexandra Baker	New Castle, IN	Colleen Demoss	Wheatfield, IN	Dana Henderson	LA Porte, IN
Celeste Beatty	Indianapolis, IN	Kacy Desmonds	Fort Wayne, IN	Melissa Hoeping	Edinburgh, IN
Suzanne Borse	Indianapolis, IN	Cecilia Dietz	Sheridan, IN	Lori Holladay	Evansville, IN
Becky Bottorff	Sellersburg, IN	Alethia Donald	Hobart, IN	Debra Howell	Paulding, OH
Mary Brand	Whiteland, IN	Annette Drook	Carmel, IN	Jessica Howell	Washington, IN
Lyndsey Brooks	Lafayette, IN	Annette Edgell	Decatur, IN	Lori Anne Huegel	Mishawaka, IN
Denise Brooks	Clarksville, IN	Vickie Emberton	Crawfordsville, IN	Robin Huffman	Highland, IN
Lori Bumps	Greenwood, IN	Victoria Enriquez	Bloomington, IN	Belinda Humble	Demotte, IN
Abby Bushnell	Indianapolis, IN	Russell Ewing	Evansville, IN	April Inlow	Noblesville, IN
Diana Carlson	Monticello, IN	Cynthia Fohrman	Hebron, IN	Lee Ivers	Converse, IN
Cynthia Cartee	Greenwood, IN	Shannon Ford	Clayton, IN	Candice Jackson	Indianapolis, IN
Julia Chairez	Goshen, IN	Melissa Fouts	Russiaville, IN	Wanda James	Jeffersonville, IN
Jeanne Clark	Martinsville, IN	Sarah Frazee	Fort Wayne, IN	Marlita Joseph	Delphi, IN
Melissa Collins	La Porte, IN	Gwyndolyn Fultz	Lafayette, IN	Susan Kelty	Huntertown, IN
Nicole Courtney	Pendleton, IN	Darlene Geoghan	South Bend, IN	Kaitlin Kendys	Saint John, IN
Micky Craney	Fishers, IN	Kathleen Gillum	Valparaiso, IN	Jessica Knapp	Muncie, IN
Cheyenne Cumberland	Fort Wayne, IN	Jessica Gonzalez	Indianapolis, IN	Patty Lake	Greenfield, IN
Roslyn Davila	Chesterton, IN	Elizabeth Gushwa	Mishawaka, IN	Courtney Lear	Rockville, IN
				Pamela Lewis	Noblesville, IN
				Amy Little	Bloomington, IN
				Kelly Lively	Kokomo, IN
				Angela Mamat	Evansville, IN
				Issifu Mambelimba	Mishawaka, IN
				Sherry Mauer	Batesville, IN
				Cynthia McClellan	Marion, IN
				Judith Mcintosh	Frankfort, IN
				Brad Milbuen	Anderson, IN
				Juliet Mills	Noblesville, IN
				Zandra Ohri	Indianapolis, IN
				Kelly O'Shaughnessey	Noblesville, IN
				Linda Patton	Plainfield, IN
				Evelyn Payne	South Bend, IN
				Kimberly Porter	Lafayette, IN
				Bradley Poteat	Indianapolis, IN
				Michelle Pratt	South Whitley, IN
				Tawny Raftery	Westfield, IN
				Shannon Rhea	Greenwood, IN
				Wanda Riley	Petersburg, IN
				Erin Rissler	Mishawaka, IN
				Lynn Robbin	New Palestine, IN
				Melinda Rogers	Martinsville, IN
				Diane Rogers	Indianapolis, IN
				Michaela Roland	Greenwood, IN
				Pamela Roth	Indianapolis, IN
				Coreena Schroyer	South Bend, IN
				Connie Seigman-Jones	Indianapolis, IN
				Judi Serhal	Valparaiso, IN
				Parhom Shoar	Bloomington, IN
				Stephanie Simpson	Danville, IN
				Michelle Sluss	Indianapolis, IN
				Angelique Smith	Highland, IN
				Angela Soria	Goshen, IN
				Teresa Stone	Clarksville, IN
				Penny Strouse	Greenwood, IN
				Nena Tejano	Logansport, IN
				Jennifer Toney	Terre Haute, IN
				Cheryl Trice	Indianapolis, IN
				Erika Tucker	Indianapolis, IN
				Sharon Tutlewski	Chesterton, IN
				Michele Vargas	South Bend, IN
				Renita Vlasek	Long Beach, IN
				Kathleen Ware	Fort Wayne, IN
				Heather Webster	Elkhart, IN
				Frankie Whitesel	Anderson, IN
				Jacquelyn Whobrey	Brownsburg, IN
				Eyde Williams	Indianapolis, IN
				Lacresha Williams	Evansville, IN
				Elizabeth Wingerter	Indianapolis, IN
				Tina Wisehart	Noblesville, IN
				Megan Wolfe	Martinsville, IN
				Scott Wood	Battle Ground, IN
				Yeijin Yeom	Terre Haute, IN
				Amanda Young	Lapel, IN
				Noah Zanville	Carmel, IN

INDIANA STATE NURSES ASSOCIATION

The ISNA is a Constituent Member of the American Nurses Association

APPLICATION FOR RN MEMBERSHIP in ANA / ISNA

Or complete online at www.NursingWorld.org

PLEASE PRINT OR TYPE

Last Name, First Name, Middle Initial

Name of Basic School of Nursing

Street or P.O. Box

Home phone number & area code

Graduation Month & Year

County of Residence

Work phone number & area code

RN License Number State

City, State, Zip+4

Preferred email address

Name of membership sponsor

1. SELECT PAY CATEGORY

_____ **Full Dues – 100%**
Employed full or part time.
Annual – $281
Monthly (EDPP) – $23.92

_____ **Reduced Dues – 50%**
Not employed; full-time student, or 62 years or older.
Annual – $140.50
Monthly (EDPP) – $12.39

_____ **Special Dues – 25%**
62 years or older and not employed or permanently disabled.
Annual – $70.25
Monthly (EDPP) $6.85

2. SELECT PAYMENT TYPE

_____ **FULL PAY – *CHECK***

_____ **FULL PAY – *BANKCARD***

Card Number

VISA/Master card Exp. Date

Signature for Bankcard Payment

_____ **ELECTRONIC DUES PAYMENT PLAN, MONTHLY**

The Electronic Dues Payment Plan (EDPP) provides for convenient monthly payment of dues through automatic monthly electronic transfer from your checking account.

To authorize this method of monthly payment of dues, please read, sign the authorization below, and enclose a check for the first month (full reduced $12.38).

This authorizes ANA to withdraw 1/12 of my annual dues and the specified service fee of $0.50 each month from my checking account. It is to be withdrawn on/after the 15th day of each month. The checking account designated and maintained is as shown on the enclosed check.

The amount to be withdrawn is $_____ each month. ANA is authorized to change the amount by giving me (the under-signed) thirty (30) days written notice.

To cancel the authorization, I will provide ANA written notification thirty (30) days prior to the deduction date.

Signature for Electronic Dues Payment Plan

3. SEND COMPLETED FORM AND PAYMENT TO:

Customer and Member Billing
American Nurses Association
P.O. Box 504345
St. Louis, MO 63150-4345

Name Game: How to Best Display Nursing Credentials

Theresa A. Kessler, PhD, RN, ACNS-BC, CNE
Professor Kreft Endowed Chair for the Advancement of Nursing Science
Valparaiso University
College of Nursing and Health Professions
terry.kessler@valpo.edu

Elise M. Alverson, DNP, RN, FNP-BC, CNE
Associate Professor Emerita
Valparaiso University
College of Nursing and Health Professions

Many nurses face the question of how to display their professional credentials when signing their name or documenting credentials. Professional credentials include educational preparation, licensure, and certification. Unfortunately, credential documentation has become more complicated as the role of nurses has expanded both educationally and professionally. Currently, nurses can earn over 200 legal and professional credentials.

Nurses have been playing the "Name Game" with listing credentials after their name for years. Originally written and performed by Shirley Ellis, "The Name Game" is a popular song from the 1960's in which new names are created by adding and subtracting letters forming variations on a person's name. Each verse begins and ends with the original name, but in the middle, there are multiple modifications. Nurses have been playing this "Name Game" with initials for multiple combinations of degrees, licensure, and certifications.

When reading publications, name tags, business cards, and online resources where nurses list credentials, there is a plethora of methods. How are other nurses, health professionals, policy makers, or even health care consumers to understand what the credentials signify? This "Name Game" affects the credibility and professionalism of nursing. The nursing profession needs to establish a standard process for displaying credentials and implement a marketing strategy to convey this standard.

Multiple sources give advice on how to list credentials; however, frequently these are individual nurses sharing opinions. Unfortunately, few professional organizations offer specific guidelines. Position statements for listing credentials cannot always be easily located with search terms even on the websites of credentialing organizations. However, the American Nurses' Association (ANA, 2009) and the American Nurses Credentialing Center (ANCC, 2013) clearly display guideline information and recommend the same sequencing: list the most permanent to the least permanent credential. Educational degrees are permanent; however, licenses, state designations for practice, and certifications must be renewed and can be revoked. The ANA recommends this sequencing to establish a "recognizable and understandable credential usage process" across all areas of nursing practice (ANA, 2009). Other professional organizations support this same sequence including the American Academy of Nursing, the American Academy of Nurse Practitioners (AANP), the American Association of Colleges of Nursing, and the National League for Nursing.

Based on these recommendations, credentials and order of appearance would include:

Academic degree – List the highest degree first. Academic degrees include doctoral, masters, baccalaureate, and associate degrees; these degrees can only be taken away under rare circumstances. If a nurse has two degrees in nursing, list only the highest earned degree (i.e. Chris Smith, MSN, RN). Not all earned degrees indicate nursing. For example, PhD does not clearly articulate the highest academic level of nursing education since the PhD could be in a variety of disciplines. If the PhD is not in nursing, the person should consider adding the highest nursing degree (i.e. Pat Smith, PhD, MSN, RN). If a nurse has the highest academic degree in another discipline, list the highest earned nursing degree as well (i.e. Kelly Smith, MPH, BSN, RN). If the nurse has two different degrees at the same academic level, list the nursing degree first (i.e. Leslie Smith, BSN, BA, RN). Some nurses list all earned degrees in the order of receiving the degree; however, this practice adds to the "Name Game."

Licensure – List licensure after academic degree. These credentials are granted after completing an educational program and passing a national licensure examination. Nurses must sign this credential as designated by the state on legal documents.

State Designation or Requirements – Recognized licensure awarded beyond the RN state licensure. These credentials signify the nurse has the authority to practice at an advanced level in a particular state and often designate a specific Advanced Practice Nurse (APN) role. Unfortunately, each state has created a variety of credential acronyms for these advanced roles (i.e. APRN, CRNP, CRNM). Since these designations are governed by each state, nurses must use the legal credential based on each state's nurse practice act. At this time, these individual state designations do not transfer from state to state. The adoption of the Consensus Model for APRN Regulation: Licensure, Accreditation, Certification & Education (NCSBN, 2008) will rectify this part of the "Name Game."

National Certification – List certifications from recognized national certifying organizations. These organizations can offer certifications at a specialty and/or an advanced level. For example, the American Board of Nursing Specialties (ABNS) has over 30 certification organization members (ABNS, 2016). The ANCC, AANP, and the Oncology Nursing Certification Corporation (ONCC) are just a few examples of these national organizations. Certifications are typically linked to a professional role, job, or licensure. For instance, the ANCC offers certification designated as RN-BC (Registered Nurse-Board Certified) and advanced certification such as FNP-BC (Family Nurse Practitioner-Board Certified). Nurses must identify the correct certification acronym since some certification credentials have changed. For example, the nurse executive credential changed from CNAA (Certified Nurse Administrator, Advanced) to NEA-BC Nurse Executive Advanced-Board Certified. Unfortunately, some nurses still cite the older credential causing confusion and adding to the "Name Game."

Honors and Awards – Next, recognize awards designating outstanding achievements. These are typically given for highest distinction and are listed last per the awarding organization's recommendations (i.e. Fellow of the American Academy of Nursing (FAAN).

Other Certifications/Certificates – Identify additional skills and knowledge usually gained through education and/or examination. These certificates may be associated with nursing such as Advanced Cardiac Life Support (ACLS) or non-nursing such as Editor in the Life Sciences (ELS). If there are multiple certifications/certificates, it may be difficult to decide what order. A good rule is to list in order of relevance to practice or the order in which they were obtained. It is important to list non-nursing designations last. Keep in mind, too many letters can be confusing to other health care professionals and consumers. Needless to say this also promotes the "Name Game."

The recommended standard credential order must be consistently followed. To promote this standard, it is essential to communicate this order to all practicing nurses, new graduates, publishers, and those who achieve new credentials. A marketing strategy that includes a well-crafted message will assist the nursing profession in making this cultural change. Preparing publications for dissemination and persuading professional organizations to clearly articulate and post the standard recommendations are needed.

Credentialing is a way of identifying achievements, expertise, and credibility. The ability to clearly display educational preparation, legal licensure, and professional certification to consumers, health care professionals, and policymakers is crucial to the advancement of nursing. As stated by Mary Smolenski (2002), "If you put the Right letters, in the Right order, at the Right time, for the Right reason, and they mean something to the Right person you can win the game" (p. 5). The future of the nursing profession is dependent upon nurses proceeding in a united manner. By consistently documenting nursing credentials, nurses can have a consistent "name" and the "Name Game" music can stop.

References

American Board of Nursing Specialties. (2016). *ABNS Regular Members.* Retrieved from: http://nursingcertification.org/membership-directory-regular.html

American Nurses Association. (2009). *Credentials for the Professional Nurse: Determining a Standard Order of Credentials for the Professional Nurse.* Retrieved from: http://nursingworld.org/MainMenuCategories/Policy-Advocacy/Positions-and-Resolutions/ANAPositionStatements/Position-Statements-Alphabetically/Credentials-for-the-Professional-Nurse-Determining-a-Standard-Order-of-Credentials-for-the-Professi.html

American Nurses Credentialing Center. (2013). *How to Display Your Credentials.* Retrieved from: http://www.nursecredentialing.org/DisplayCredentials-Brochure.pdf

National Council of State Boards of Nursing (NCSBN). (2008). *Consensus Model for APRN Regulation.* Retrieved from: https://www.ncsbn.org/736.htm

Smolenski M. (2002). *Playing the credentials game.* Silver Spring, MD: American Nurses Credentialing Center. Retrieved from: http://www.nursecredentialing.org/Documents/Certification/Articles/PlayingtheCredentialsGame.pdf

Policy Primer

Blayne Miley, JD
Director of Policy & Advocacy
bmiley@indianapolisnurses.org

The 2017 Indiana General Assembly session is just around the corner. Over 1,000 bills will be introduced the first week of January. Your next issue of the Bulletin in February will include a rundown of healthcare-related bills. Members of ISNA will receive weekly updates through our e-newsletter, the ISNAbler, on this important legislation that impacts your profession. As a precursor to the legislative session, over the past few months there have been legislative interim study committee hearings on potential issues for 2017.

Interim Study Committees & Advisory Councils

The Interim Study Committee on Public Health, Behavioral Health, and Human Services held three hearings to consider issues for potential introduction in 2017. One of the topics discussed was the Nurse Licensure Compact. ISNA testified at the hearing, providing information on the compact. After soliciting input throughout the summer, ISNA represented that some of our members support the compact and some have concerns. The members of the committee were alarmed by the prospect of a nurse from another state coming to Indiana to practice with no regulatory check-in or monitoring from the Indiana State Board of Nursing. Compact states must adopt the national model language to be accepted into the compact and this prohibits any regulatory step for nurses traveling from one compact state to another. The Attorney General submitted information asserting the model compact language conflicts with Indiana laws regarding privacy and government spending. The Board of Nursing did not participate in the hearing. Twice before, Indiana has passed a bill to join the compact, but modified the language from the national model. In both cases, Indiana was not accepted into the compact. At the end of the hearing, the committee members unanimously voted not to recommend moving forward with the Nurse Licensure Compact in Indiana at this time. This does not preclude a bill being introduced in 2017 on this topic.

The study committee also held a hearing on hospital employee immunizations. This was a follow-up to Senate Bill 162, which did not pass during the 2016 session. At the hearing, the Indiana Hospital Association (IHA) recommended that the legislature monitor the situation without moving legislation forward, because of the existing efforts to promote health professional immunization rates. I then testified that ISNA supports efforts to increase health professional immunization rates, however due to concerns about some of the implementation language in SB 162, ISNA joins IHA's suggestion that the committee not move forward with legislation and instead work through the existing infrastructure to promote immunization rates. You may recall, the concerns about SB 162 were based on the control it would have given the hospital over exceptions to immunization policy, as well as providing hospitals with immunity for wrongful terminations. Those details could have made things worse for Indiana nurses if the legislature passed a statewide mandate. Next, there was testimony from those opposed to any form of immunization mandate for a variety of reasons, including health risks, job risks, and government bias based on the influence of pharmaceutical money. After the testimony, the committee voted not to recommend legislation in their final report. Again, this does not preclude a bill being introduced in 2017 on this topic.

The Interim Study Committee on Fiscal Policy was assigned the topic of a food desert grant/loan program. A bill establishing such a program has been introduced in the last two legislative sessions, but has not passed. The Committee's preliminary report states that "a more robust discussion is needed of the economic challenges that food providers must overcome in order to locate in underserved areas. Committee discussion was focused on the scope of the problem and did not adequately address the underlying causes that lead to food deserts." So, the legislators would need to know more about this issue to feel comfortable moving a bill forward in the upcoming session.

In addition to the legislative study committees there are multiple advisory councils that make healthcare policy recommendations to the government year-round. Here are some of them with an update on what they've been up to recently:

- FSSA's Medicaid Advisory Council
  - Workgroup made recommendations to improve the provider audit process by making it more provider-friendly
- Governor's Health Workforce Council
  - Exploring Health Professions Innovations Program which could approve healthcare delivery pilots outside current regulations
- Governor's Task Force on Drug Enforcement Treatment and Prevention
  - Endorsed Guidelines for Opioid Prescribing in the Emergency Department
- Attorney General's Prescription Drug Abuse Task Force
  - Sponsoring community take-back events for unused prescription drugs

And let's not forget the Indiana State Board of Nursing in our discussion of policy-making. The October meeting included discussion of a proposal by the Indiana Chapter of the Philippine Nurses Association (PNA) to modify Indiana's nursing license requirements for foreign-educated nurses. Current Indiana policy requires nurses in foreign countries (other than Canada) who wish to obtain an Indiana license to go through the Commission on Graduates of Foreign Nurses Schools' (CGFNS) certification process, which includes a credential review, nurse qualifying exam, and English proficiency verification. After this process is complete, the applicant may be eligible to take the NCLEX exam. This procedure was put in place years ago, before NCLEX was administered internationally by Pearson VUE (the same entity that administers NCLEX domestically). Thirty-five states and DC have removed the CGFNS nurse qualifying exam requirement, which is what PNA is proposing Indiana does. Foreign nurses would still be required to go through CGFNS's credential review and English proficiency verification. In 2008 and 2012, the Board of Nursing voted to move forward with the administrative change, but both times the issue was hung up in the administrative rulemaking moratorium. ISNA has supported the proposal each time, and I participated in the October hearing, which also included a letter of support from the Indiana Center for Nursing (ICN) and the ICN Diversity and Inclusiveness Initiative. The hope is that the proposal will be able to complete the administrative rule-making process on the third try. The Board of Nursing agreed to have the matter reviewed by their Education Subcommittee, which has been meeting to consider administrative rule updates to the regulations regarding nurse education programs.

ISNA Convention & Infant Mortality

Thank you to all who joined us at IU Kokomo to make the 2016 ISNA Convention an attendance record-setter! In addition to hearing the wonderful podium and poster presentations, the membership adopted a reference proposal to add the following to the ISNA Policy Platform:

ISNA advocates for the implementation of Nurse Family Partnerships (NFP) across the state with availability to every first-time, low-income mother.

Infant mortality is a priority focus for the Indiana State Department of Health, because Indiana's infant mortality rate (7.1 per 1,000 births) is worse than the Healthy People 2020 goal rate (6.0 per 1,000 births). ISDH has a number of initiatives to reduce infant mortality, and expanding the availability of NFP could be part of that effort. You can learn more about the program at www.nursefamilypartnership.org.

Nurses on Boards

I want to remind you of your opportunity to join a national initiative to improve public health. The Nurses on Boards Coalition is striving to improve the health of communities through the service of nurses on boards, because all boards benefit from the unique perspective of nurses to achieve the goals of improved health and efficient and effective health care systems at the local, state, and national levels. At www.nursesonboardscoalition.org, you can (1) sign up to be counted if you are on a board and/or (2) indicate you would be interested in serving on a board. I am part of a state-level coalition of multiple nursing organizations that is developing educational content and finding board opportunity matches for those who have indicated they are interested in serving on a board, and I encourage you to be part of this leadership effort!

Confessions of a (formerly) Quiet Constituent

Leah Scalf RN, MSN, NE-BC

Are you aware hundreds of bills are initially proposed to be heard during each Indiana legislative session? In an interview with Cindy Kirchhofer, State Representative for District 89 and Chair of the House Public Health Committee, she stated it is not unheard of to have 1,000 proposed bills submitted in the hope of being heard during session. Of those, she estimated that approximately 200 are related to issues important to healthcare providers. Of those 200, around 50 proposed bills will be moved on for further review and potential presentation during the legislative session. If only 10% of those make it through the legislative process of both the House and Senate and are signed into law, that could result in 5 new bills potentially affecting nurses in Indiana. Representative Kirchhofer stated that nursing is one of the largest professional groups in Indiana. Data from the Kaiser Family Foundation certainly supports this finding showing that as of April 2016, there are 116,407 professionally active nurses (RN and LPN) in the state of Indiana placing us 11th in the nation (Kaiser Family Foundation [KFF], 2016). Representative Kirchhofer went on to state that in terms of commenting on new legislation, nurses are also one of the "quietest" groups. As a graduate student earning my Doctorate in Nursing Practice (DNP), I have seen this as well. During a policy course, we heard directly from multiple legislators their desire to hear from nurses. Representative Kirchhofer spoke on this topic during the recent Indiana Organization of Nurse Executives (IONE) Inaugural Health Policy Advocacy Day this past September. She stressed the importance of building a relationship with your legislators. This can be as simple as introducing yourself when you see them out in public and thanking them for their service. Most surprising to me was learning that because our representatives and senators hear from nurses so seldom, just a few of us becoming involved can make a huge impact. Representative Kirchhofer elaborated on this stating that she values hearing not only from her constituents, but from all citizens of Indiana regarding issues that are important to them.

An example of a nurse who has become involved in the legislative process is Jo May RN, MSN, CNS, RN-BC Director of Quality, Safety, and Regulatory for Franciscan Health Central Indiana Region. She recently had the opportunity to observe a meeting of the Public Health Interim Committee in which proposals regarding both the Nurse Licensure Compact and Immunizations for Healthcare Providers were being evaluated for further review. I had the opportunity to sit down with Jo and ask about her thoughts from her observation as well as nursing's role as health policy advocates. She stated "If I was not paying attention to the legislative process, I would not have known that the Nursing Compact or Immunizations for Healthcare Providers were being presented for consideration. These are important issues to nursing. They impact us at a professional and personal level. We had organizations such as the ISNA speaking for us, but I feel that our legislators need to hear from us individually as well. As constituents, our individual opinions are important to them." She went on to add "I was surprised at how quiet nursing's voice was and how much our voice matters. If someone is speaking on behalf of nursing, the representatives and senators will take that as the voice of the whole when that may not represent nursing's collective voice at all. The voice that is in front of them can influence their decision and vote. As a constituent, I don't have to go to the chair of a committee such as Public Health to make my opinion heard. I can go directly to my legislator and they will represent my voice."

I confess that I used to believe that policy advocacy involved a nurse expert testifying before the general assembly utilizing volumes of data and elaborate graphs to support testimony. What I have learned during the process is that legislators want my opinion as a healthcare expert even if it is just sitting down and talking to them on the phone for 5 minutes or sending them a personal email giving my view of an upcoming bill. Even though we lead very busy lives, becoming health policy advocates is important not only to promote our profession but is critical because it impacts us at an individual level in the work that we do each day. There are several resources to help us become health policy advocates. Most of our professional organizations have resources devoted to health policy. For ISNA, one such resource is the ISNAbler (http://isnanurses.org/policy/isnabler), the weekly e-newsletter sent to all ISNA members. Another is ISNA's Policy Conference during the legislative session. There is also the Indiana General Assembly website (iga.in.gov) which can help us stay informed regarding legislation to be heard in the General Assembly relating to nursing. Many sessions can be viewed on-line.

I now understand the importance of providing my voice and experience as a nurse to help promote my profession. I recognize the significance of protecting nursing's interest regarding future bills coming before the General Assembly and understand how little it takes to make a big impact. This has really opened my eyes and given me the inspiration to become involved in the process. It is that inspiration that I want to pass along to my colleagues in nursing. You can get started now by going to this website: https://iga.in.gov/legislative/find-legislators/ to find your legislators and send them a quick email to introduce yourself and thank them for the work that they do in supporting health policy.

References

Kaiser Family Foundation. (2016). Total number of professionally active nurses. Retrieved from http://kff.org/other/state-indicator/total-registered-nurses/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

Independent Study

Interpreting Common Lab Values

This independent study has been developed to enhance the ability to interpret four common lab tests as well as blood gas findings. 1.05 contact hour will be awarded.

The Ohio Nurses Association (OBN-001-91) is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

(Expires 1/2018).

DIRECTIONS

1. Please read carefully the attached article entitled "Interpreting Common Lab Values," and answer the post-test questions.
2. Return the following to the Indiana State Nurses Association, 2915 N. High School Road, Indianapolis, IN 46224.
   - The post-test;
   - completed registration form;
   - and evaluation form.

The post-test will be reviewed. If a score of 70 percent or better is achieved, a certificate will be sent to you.

If a score of 70 percent is not achieved, a certificate will not be issued. A letter of notification of the final score and a second post-test will be sent to you. We recommend that this independent study be reviewed prior to taking the second post-test. If a score of 70 percent is achieved on the second post-test, a certificate will be issued.

If you have any questions, please feel free to call Marla Holbrook at 317-299-4575 or mholbrook@indiananurses.org.

The author of this study is Barbara Walton, MS, RN. The author and planning committee members have declared no conflict of interest.

Outcome: Enhance the ability to interpret four common lab tests as well as blood gas finding.

Disclaimer: Information in this study is intended for educational purposes only. It is not intended to provide legal and/or medical advice.

DIRECTIONS: Read the following case studies. Answer the questions regarding each case study and then review the correct answer and its explanation. At the end of the program, complete the post-test by circling the one correct answer for each multiple-choice question.

HEMATOLOGIC LAB STUDIES

Mrs. J. has brought her 4 year old son, Todd, to the office with complaints of persistent nose bleeds. She states he has a nose bleed at least once a day and she has noticed that he seems to have more bruises on his arms than usual. Your physical exam reveals several ecchymotic areas on both arms in various stages of healing. He denies any trauma to the areas, stating that they "just happen." His last nose bleed was yesterday around noon. He denies nose picking or other trauma. He states, in fact, that he was just "watching TV" when his nose began to bleed yesterday. His mother states the bleeding is always profuse, usually from both sides of the nose and it generally takes about 15 minutes to get it stopped. His vital signs are: T 98.6, B/P 80/60, HR 100, R 22. Ht 42 inches, and wt 45 lbs.

1. In light of your findings and the patient's history, what blood studies would you expect the physician or APN to order?

Discussion

If you answered CBC with diff, PT, PTT, and platelets you are right on target! Let's take a look at why these tests would be ordered.

By definition, epistaxis is bleeding from the nose caused by irritation, trauma, coagulation disorders, or chronic infection. The history obtained from the patient and his mother rules out trauma and irritation, leaving coagulation disorder and infection as strong possibilities. He also has several bruises which may hint at some hematologic problem. His lab results are:

CBC	
RBC	4.0 million
MCV	80
MCH	27
Hgb	9.4
Hct	31%
Platelets	80,000
WBC	75,000
Differential:	
Neutrophils	65%
Lymphocytes	32%
Monocytes	3%
Eosinophils	3%
Basophils	.5%

2. Identify which of the above lab values are normal or abnormal by placing an N or an A next to each result.

Discussion

Let us now review your answers about whether or not these are normal lab values.

RBC: 4.0 million

This is a low normal value for a child 4 years of age. Normal value is 4.5-5.2 million, although values for all lab findings may vary slightly from lab to lab.

MCV: 80

The mean corpuscular volume of the red blood cell determines the size and volume of each red blood cell. The normal for this patient would be 80. If you marked it normal you were right!

MCH: 27

This is the mean corpuscular hemoglobin and determines the hemoglobin content in RBCs. (Hemoglobin of 100 ml of RBCs). Todd's value is normal.

These corpuscular tests are helpful when diagnosing certain types of anemias, hepatic disease, iron deficiency, malaria and many other disorders that affect the hematologic system.

Hgb: 9.4

This determines the amount of hemoglobin in a given volume of blood. A four year old child should run between 9.4 and 15.5. Todd is on the low side of normal.

Hct: 31%

The hematocrit determines the percentage of blood composed of RBCs. Todd should fall between 31% and 44%. Again, our patient is on the low end of normal.

ISNA Convention

Independent Study

Platelets: 80,000

The platelet count determines the number of platelets in 1 mm3 of blood. Normal platelet count would be about 250,000. Did you mark this test result as abnormal? Since platelets play a significant role in coagulation, this may be part of the reason for Todd's bruises and his frequent epistaxis.

WBC: 75,000

The WBC gives us the number of white blood cells in 1 mm3 of blood. Normal for Todd should be 5700-13,000. His WBC is extremely elevated, more than would be expected if he just had an infection. Our next step is to look at the differential to see if it will tell us more about Todd's problem.

Neutrophils: 65%

In a WBC differential, 100 or more white cells are classified into two major types of leukocytes: granulocytes (neutrophils, eosinophils, basophils) and nongranulocytes (lymphocytes and monocytes). Neutrophils play an important role in fighting bacterial infection in the body. Large numbers of neutrophils can be produced by the bone marrow in response to infection. Soon, however, our body runs out of mature neutrophils and begins pushing immature ones into our system. Immature neutrophils (called blasts, bands or stabs) are not as effective as mature neutrophils. An increase in the immature neutrophils is called a "shift to the left." Normal neutrophil count for Todd would be about 50-60. His is elevated, indicating either a ferocious infection or a problem with the white cells themselves.

Eosinophils: 3%

Eosinophils elevate in times of allergic reaction. Normal is 1-3% of the WBC. Todd is normal here.

Basophils: .5%

Basophils work in hypersensitivity reactions and enhance the inflammatory response. Normal value is 0-0.75%. Todd falls within normal limits.

Lymphocytes: 32%

Usually about 30% of the total white blood cell count is lymphocytes. They play a major role in cell-mediated and humoral immunity and are divided into T-cell and B-cells. This is an abnormal elevation for Todd.

Now let us put all this information together. Todd has a grossly elevated WBC with a pronounced "shift to the left." The lymphocyte count stands out as well. His platelet count is decreased and his H/H is borderline low. All of this data may indicate that Todd is experiencing acute leukemia and that is the reason for his frequent epistaxis and many bruises. However, further testing would be indicated, especially a blood smear which would show numerous blast (immature) cells. A bone marrow biopsy might also be scheduled and would also reveal massive blast cells.

BLOOD CHEMISTRIES

Ms. S. is a 24 year old female who presents to the office with complaints of severe diarrhea. She states she has been having at least ten bowel movements per day. She describes them as watery brown, somewhat mucousy and in large amounts. She also states she has severe cramping with them. She claims she has never experienced this in the past. Your physical examination reveals a very thin, pale woman with dry mucus membranes and poor skin turgor. She is 5'7" tall and weighs 105 pounds. She states this is ten pounds below her usual weight.

She is on no medications and states she thought she just had the "flu" but became concerned when it did not clear up in a few days.

Vital signs are T 99, HR 100, RR 24, B/P 90/60 in the upright position.

1. Given this information, what blood chemistries would you expect to be ordered?

Discussion

Most of you would agree that the physician or APN would probably order at least serum electrolytes, BUN and creatinine in addition to a stool culture.

Ms. S's blood chemistries were:

Na	130
Cl	92
K	3.0
CO2	22
Cr	1.0
BUN	20

2. Take a moment now to write N for normal or A for abnormal next to each of the values.

Let us now take a look at each value and see what information it gives us.

Na: 130

If you labeled this as abnormal, you are right. Normal serum sodium for adults is about 135-145. Again, it is important for you to familiarize yourself with the values used at your lab since they may vary slightly from lab to lab.

Cl: 92

This is abnormally low. The normal range is 97-107.

CO2: 22

This falls within the normal limits of 22-30.

Cr: 1.0

A normal creatinine is .5-1.1.

BUN: 20

This is an elevated level since the normal is about 5-18.

You probably had no problem recognizing the abnormal values with this patient. Now let us put all the values together so that we can draw some conclusions about Ms. S's problem.

Your examination of the patient revealed signs of dehydration. She has dry mucus membranes and poor skin turgor. Her heart rate is 100 and her B/P 90/60. She also has a recent weight loss of ten pounds. As we look at the lab values to validate our assessment we see that she has a low Na and Cl level and an elevated BUN. These can be indicators of dehydration.

There are several subgroups of water-sodium imbalances: osmolar imbalances, which have to do with the amount of water in the body in relation to the number of solutes, and volume imbalances, in which sodium, chloride and water work together as a team. This patient has a typical hypovolemia characterized by loss of Na, Cl, and water together. The BUN also reveals some information. An elevated BUN unaccompanied by an elevation in the creatinine can often be found when patients are hypovolemic or in a starvation state where protein begins to be catabolized (broken down) for energy. Our patient fits this picture as well.

A low serum potassium can be accounted for by the large volumes of diarrhea. Classically, diarrhea causes at least three major fluid and

Independent Study continued on page 10

Independent Study

Independent Study continued from page 9

electrolyte imbalances: dehydration, NA deficit, and K deficit. The body has compensatory mechanisms such as fluid shifts, aldosterone and ADH secretion which attempt to deal with the fluid and electrolyte disturbances caused by diarrhea. In this patient's case, these mechanisms were not enough to correct her problems.

Our initial lab values show dehydration, hyponatremia, hypochloremia, and hypokalemia. These are the results of the patient's problem but do not give us the full picture. More information is needed to further identify the cause of her diarrhea. She may be suffering from her first episode of ulcerative colitis. In the meantime, you could expect the physician or APN to treat the fluid and electrolyte disturbances because further depletion could result in severe complications such as cardiac dysrhythmias and renal failure.

ARTERIAL BLOOD GAS VALUES

Mr. M. is a 59 year old male who has been under the care of your physician group for several years. He has a long history of emphysema, having been a 50 pack/yr smoker. During the last year he has been hospitalized twice for respiratory failure, the last time resulting in a two week stay in the intensive care unit on a ventilator. For the last two months, Mr. M. has been relatively well. He has presented himself to the office for a routine check-up. He is 5'9" and weighs 180 pounds. Vital signs are T 98, HR 100, RR 38, B/P 150/90. He denies shortness of breath but appears to be working hard at his breathing, using all of his accessory muscles. His lips and nailbeds are slightly cyanotic. The physician orders a set of arterial blood gases. You accompany Mr. M. to the lab next door and await the results.

His ABGs were:		Normal Value
pH	7.30	7.35-7.45
PaO2	50	90-100
PaCo2	65	40
HCO3	20	24

1. What is your interpretation of these values?

Discussion

There are four major acid-base disorders: respiratory acidosis, respiratory alkalosis, metabolic acidosis and metabolic alkalosis. Typically the interpretation of blood gases is a simple process. The chart below gives you a "quick look" method:

Resp acidosis	PaCO2 rises and pH falls
Resp alkalosis	PaCO2 falls and pH rises
Met acidosis	HCO3 falls and pH falls
Met alkalosis	HCO3 rises and pH rises

Note that the PaO2 does not play a role in delineating acid-base imbalance. However, it is an important indicator of oxygenation and should be evaluated within the context of the acid-base balance.

2. Interpret the following blood gases.

	pH	PaCO2	HCO3	Interpretation
a.	7.50	32	28	
b.	7.29	40	15	
c.	7.24	60	26	
d.	7.46	30	23	

Here are the answers:

a) metabolic alkalosis
b) metabolic acidosis
c) respiratory acidosis
d) respiratory alkalosis

Of course, blood gas interpretation is not always so easy since the body has compensatory mechanisms which try to return the body to a normal pH. These mechanisms do not always work, especially in patients who have been in chronic acid-base imbalance.

Let us go back now and look at Mr. M. Did you interpret his blood gases as respiratory acidosis? If you did, you were correct. Patients with emphysema have lost their gas-exchange surface because of the loss of the elastic recoil of the alveoli. The result is air-trapping and destruction of the alveolar wall. These patients usually compensate over time for the CO2 retention that takes place and they become members of what is often called the 50/50 club. This means that their bodies adjust to a 50 PaO2 and a 50 PaCO2. It is when the PaCO2 begins to rise above the PaO2 that respiratory failure ensues. Even though Mr. M. is denying any shortness of breath, his ABGs indicate that soon his respiratory status will degenerate. He requires immediate intervention such as low flow oxygen therapy and breathing treatments which will help him blow off some of this excess CO2.

URINE STUDIES

Mrs. H. is a 50 year old owner of a small business. She presents at the office with complaints of a burning, stabbing pain in her lower pelvis that is only relieved when she urinates. She states that she gets up frequently at night to go to the bathroom because the pain awakens her. During the day she states she has to go to the bathroom ten or fifteen times. She has decreased the amount of fluids she drinks to try to alleviate the problem but believes that it has just gotten worse. She claims to have had this problem for about two weeks.

As you would expect, the physician orders a urinalysis and urine culture and sensitivity. Here are the results of those tests:

Urine C/S reveals more than 100,000/ml bacterial colonies

Urinalysis:	
Color	Dark Yellow
Appearance	Cloudy
Albumin	Negative
Bilirubin	Negative
Glucose	Negative
Ketones	Negative
Nitrite	Positive
Occult blood	Negative
pH	5.6
Odor	Fetid
Protein	1+
Specific grav	1.020
Urobilinogen	Negative Cells:
Erythrocytes	2
Leukocytes	7
Epithelium	8
Casts	Moderate
Crystals	Small amount
Bacteria	Large amount
Parasites	None

1. Next to each finding, place an N for normal or an A for abnormal.

Discussion

Now let's take a look and see how many you marked correctly.

Urinalysis

Several of the tests included in the urinalysis are

Independent Study

normal. Those that are abnormal, are: appearance, nitrite, odor, protein, leukocytes, and bacteria.

Urine C/S

As you know, more than 100,000/ml bacterial colonies indicate a severe infection and possibly cystitis.

Let's now take a look at each of Mrs. H's abnormal findings.

Appearance

Normal appearance of urine is clear to faintly hazy. Mrs. H's urine is obviously cloudy, indicating that perhaps she has bacteria and/or protein in it.

Nitrite

Normally we oxidize ingested nitrite and excrete it as nitrate. The presence of nitrite in the urine usually indicates a urinary tract infection with organisms that change nitrate back to nitrite.

Odor

When urine has a certain odor, it may indicate some disorder. A fishy or fetid odor indicates urinary tract infection.

Protein

Most labs will state that there should be no protein in the urine. However, some sources state that a small amount of protein in the urine can be regarded as normal. If protein is present, it should be quantified whenever the random urine sample is positive for more than a trace of protein. Mrs. H. has 1+ protein which would indicate some urinary tract disease. With her accompanying symptoms this is another piece of data to support severe cystitis.

Leukocytes

The presence of leukocytes in the urine is abnormal. Their presence indicates inflammation and/or infection.

Bacteria

Normally there should be no bacteria or less than 1000/ml. Mrs. H. has a large amount of bacteria present. This finding, along with all the other abnormalities, require that a urine C/S be done.

As we put together both the lab data and the clinical signs and symptoms, we quickly recognize that Mrs. H. is probably suffering from a severe case of cystitis.

We have now covered common lab tests and ABGs. Proceed to the post-test to complete this self-study packet.

Selected References

Desai, Samir. Clinicians Guide to Laboratory Medicine. MD2B Publishers, Houston TX, 2009.

Keogh, Jim. Nursing Laboratory Diagnostic Tests Demystified. McGraw-Hill, NY, 2009.

Thompson, McFarland, Hirsch and Tucker. Mosby's Clinical Nursing, Third edition. St. Louis, Mosby-Year Book Inc., 1993.

Interpreting Common Lab Values

Post-Test and Evaluation Form

DIRECTIONS: Please complete the post-test and evaluation form. There is only one answer per question. The evaluation questions must be completed and returned with the post-test to receive a certificate.

Name: _____

Date:_____ **Final Score:**_____

Please circle one answer.

1. Which of the following sets of lab tests would be ordered when trying to identify a bleeding problem?
   a. Na, C1, CO2
   b. K, Ca, BUN
   c. PT, PTT, platelets
   d. MCV, MCH, MCHC

2. Which of the following sets of lab tests would be ordered when a patient has been experiencing fluid loss through diarrhea or vomiting?
   a. PT, PTT, platelets
   b. Na, CL, K, BUN
   c. arterial blood gases
   d. SGOT, SGPT, LDH

3. The presence of many immature neutrophils in a WBC deferential is called:
   a. a shift to the right
   b. thrombocytopenia
   c. a shift to the left
   d. leukocytopenia

4. A normal serum sodium (Na) for an adult is:
   a. 135-145
   b. 5,000-10,000
   c. 2-5
   d. 20-60

5. An elevation in the BUN without an elevation in the serum creatinine can indicate:
   a. kidney disease
   b. cardiac dysfunction
   c. protein breakdown
   d. hypervolemia

6. Which of the following blood gas values indicate respiratory acidosis?
   a. pH 7.40, PaCO2 40, HCO3 24
   b. pH 7.48, PaCO2 28, HCO3 16
   c. pH 7.32, PaCO2 40, HCO3 16
   d. pH 7.30, PaCO2 50, HCO3 23

7. Which of the following blood gas values indicate metabolic acidosis?
   a. pH 7.40, PaCO2 40, HCO3 24
   b. pH 7.48, PaCO2 28, HCO3 16
   c. pH 7.32, PaCO2 40, HCO3 16
   d. pH 7.30, PaCO2 50, HCO3 23

8. In a random urinalysis, which of the following values is considered normal?
   a. trace of albumin
   b. positive for nitrites
   c. specific gravity of 1.020
   d. positive for ketones

9. The presence of leukocytes in the urine may indicate
   a. urinary tract infection
   b. poor glomerular filtration
   c. inadequate fluid intake
   d. dysfunction of the bone marrow

10. A urine culture and sensitivity indicates clinically significant bacteriuria when there are how many bacterial colonies grown?
    a. 20,000/ml
    b. 50,000/ml
    c. 75,000/ml
    d. 100,000/ml

Evaluation

1. What one strategy will you be able to use in your work setting?

2. Was this independent study an effective method of learning? If no, please comment:

	Yes	No
	☐	☐

3. How long did it take you to complete the study, the post-test, and the evaluation form? _____

4. What other topics would you like to see addressed in an independent study?

Registration Form

Name:_____
(Please print clearly)

Address: _____
Street

_____
City/State/Zip

Daytime phone number:_____

_____ RN _____ LPN

Please email my certificate to:_____
Email address

Fee:_____ ($20)

ISNA OFFICE USE ONLY

Date Received:_____ Amount:_____

Check No._____

MAKE CHECK PAYABLE TO THE INDIANA STATE NURSES ASSOCIATION (ISNA)

Enclose this form with the post-test, your check, and the evaluation and send to:

Indiana State Nurses Association
2915 N. High School Road
Indianapolis, IN 46224

Wednesday, Nov. 30, 2016

3 – 7 p.m.

Parkview Mirro Center for Research and Innovation
10622 Parkview Plaza Drive,
Fort Wayne, IN 46845

RSVPs requested by Monday, Nov. 28, 2016.

Details and reservations online at www.parkview.com/employment.

Want to learn more about northeast Indiana? See www.yourstorymadehere.com.

EXPERIENCE THE PARKVIEW DIFFERENCE:
Parkview Employment Expo for Clinical Professionals

PARKVIEW HEALTH

Want to be a Signature HERO?

NOW HIRING!

RN, LPN, CNA ALL SHIFTS

SHC at Parkwood
1001 N. Grant St
Lebanon, IN

SHC of Bluffton
1529 W. Lancaster St
Bluffton, IN

SHC of Bremen
316 Woodies Ln
Bremen, IN

SHC of Newburgh
5233 Rosebud Ln
Newburgh, IN

SHC of South Bend
52654 N. Ironwood
South Bend, IN

SHC of Lafayette
300 Windy Hill Dr
Lafayette, IN

SHC of Fort Wayne
6006 Brandy Chase Cove
Fort Wayne, IN

SHC of Terre Haute
3500 Maple Ave
Terre Haute, IN

SHC of Muncie
4301 N. Walnut St
Muncie, IN

GREAT BENEFITS, FLEXIBLE SCHEDULES, AND SIGN ON BONUS AVAILABLE IN SELECTED FACILITIES
Apply in person or online at www.mysignaturejourney.com
For more information contact Vicki Smith, RN, BSN, Director of Talent Acquisition, vismith@signaturehealthcarellc.com

Signature JOURNEYS

Signature HealthCARE