Fall 2011

Health Service Region 1

DEPARTMENT OF STATE HEALTH SERVICES

Women's Health Literature Review

Fall

Nurse retention– what does it cost to replace a nurse? Ready for a shock?

"Retaining good employees is not only smart, it's healthy for the bottom line of an agency. A recent Gallup survey shows that employees with positive attitudes toward their work generate 38% higher customer satisfaction scores, 22% higher productivity, and 27% higher profits for their companies. Valued employees are happier and more positive employees. *It is estimated that the cost to replace a nurse is $80,000.* This article goes on to suggest that once a nurse is hired, an effort should be made to integrate them into the work place and to sustain and support them for at least 100 days. It is awkward to be the 'new kid on the block'. The article suggested, when a new nurse is hired, to assign a person to invite her/him to lunch every day for the first week. Other suggestions were to send welcome cards, as well as making positive comments about their performance during orientation. Contributing to their performance file with letters, emails, or anything else that recognizes an employee's efforts is a strategy that helps retain employees. Considering it costs $80,000 to replace a nurse, retention is important." (*NURSE WEEK*, Sept 2008)

Obstructive sleep apnea and the risk of death between 10:00 pm and 6:00 am

"The hearts of patients with obstructive sleep apnea (OSA) are constantly challenged by the repetitive insults of hypoxia, surges in blood pressure and heart rate, increased negative intra-thoracic pressure and increased sympathetic tone, and a release of inflammatory mediators such as cytokines and C-reactive protein. These events contribute to endothelia dysfunction, atherosclerosis, and coronary artery disease. A recent sleep study found significant cardiac mortality in patients with OSA. In another study, patients with atherosclerosis and OSA faced a 50% or greater risk of sudden cardiac death between 10:00 pm and 6:00 am. Another study found that among patients with OSA, the odds of experiencing an acute myocardial infarction between midnight and 6:00 am was six times higher than during the rest of the day. It is noteworthy that patients who were effectively treated with a CPAP significantly reduced their cardiovascular risks to slightly higher than normal controls and snorers." (*Advance for Nurse Practitioners*, September 2009)

Close to 40,000 turned away from U.S nursing schools

"According to the American Association of Colleges of Nursing (AACN), 39,423 qualified applicants were turned away for 550 entry-level baccalaureate nursing programs in 2009. Based on data received from 318 schools of nursing, the rejection of qualified applicants was based on a shortage of faculty (60.7%), and an insufficient number of clinical placement sites (61%). The number of schools reporting budget cuts or insufficient budgets more than doubled from 14.8% in 2008 to 31.1% in 2009. Despite the rejection of qualified applicants, enrollment in baccalaureate nursing programs still increased 3.5% from 2008 to 2009. Comparing previous years, between 2005-2008, 36,000 to 41,385 qualified students were rejected for all three years combined." (*Healthcare Traveler,* January 2010)

Some creams may be risky in breast cancer patients

"Skin moisturizers marketed as youth-enhancing may contain estrogens, and daily use of products with such ingredients could pose a theoretical risk to women with breast cancer, particularly those with estrogen receptor-positive cancers who are taking aromatase inhibitors. A set of samples of 16 moisturizers advertized as rejuvenating or youth enhancing were sent to a lab for testing for estradiol, estriol, and estrone. Researchers round that four samples contained more than 0.40% estriol, with one containing 0.17%. Another sample contained 0.05% estrone. By comparison, Estrace vaginal cream only contains 0.01% of estradiol. Therefore, six of the sixteen samples had estrogen of various amounts and types. All women, and especially patients with a history of breast cancer, should be made aware of the potential risks when exposed to estrogenically active molecules in commercially available topical moisturizers." (*Contemporary OB/GYN*, September 2009)

For the seventh year in a row, Americans voted nurses tops in the annual honesty and ethics of professions survey. Nurses have led the poll every year except for 2001, when firefighters took the lead following September 11. In comparison, nurses ranked 84%, pharmacists 70%, high school teachers 65%, doctors 64%, policemen 56%, clergy 56%, funeral directors 47%, and accountants 38%." (*NurseWeek*, January 2009)

Sudden hearing loss is a medical emergency

"Idiopathic sudden sensorineural hearing loss is defined as unexplained unilateral sensorineural hearing loss with onset over a period of less than 72 hours. It is critical that sensorineural hearing loss be distinguished from a conductive loss, because a sensorineural loss is an emergency that can lead to long-term deafness and requires immediate evaluation and therapy. To test, have the patient hum softly and then indicate whether the sound of the humming is louder in the ear with the deficit, as that would suggest a conductive loss. If the sound of humming is louder in the normal ear, this would suggest sensoineural. If diagnosis is delayed, recovery of hearing is less likely and a lawsuit could be the outcome." (*Consultant,* June 2009)

Could sleep patterns impact the incidence of stillbirths?

The June 15 edition of *Medline Plus* summarized a study of women who experienced late term stillbirths. While the overall risk of a late term stillbirth is small, they occurred twice as often in women who slept on their backs or right side the night before delivery compared to women who slept on their left side. While the association is unclear, it may be that left-sided sleep allows for improved blood flow to the fetus. The study found no connection between late term stillbirths and snoring or daytime sleepiness. However, women who made two or more trips to the bathroom the night before delivery had a lower risk of stillbirths than women who made 0-1 trips. A significant link was found between late term stillbirths and sleeping during the daytime on a regular basis, as well as sleeping longer than average at night. (Editor's note: This reads such that mother's arousal and movement are protective). Additional studies will be needed before direct links can be made between late term stillbirths and these factors.

OB/GYNs fail to address osteoporosis risk

"Nearly half of approximately 800 women responding to a recent survey reported that the subject of osteoporosis was not brought up during the *LAST* routine visit. More surprising was that more than a quarter of these women, 94% of whom were 46 years of age or older, said that they have NEVER discussed osteoporosis with their OB/GYNs." (Editor's note: 45 of the 800 women surveyed had broken bones in sites commonly associated with osteoporosis during the past 5 years, but had not told their OB/GYNs about them. So, it goes both ways; the provider asking, and the patient telling. It still seems surprising that the subject of osteoporosis would not come up with all that is on television.)"

(*Contemporary OB/GYN*, February 2010)

Ibuprofen and aspirin may make SSRIs less effective

"Popular drugs like Lexapro, Prozac, Paxil, and Zoloft may not be as effective if taken with non-steroidal anti-inflammatory drugs (NSAIDs). Common OTC painkillers such as ibuprofen, aspirin and naproxen may reduce the effectiveness of the antidepressants, according to studies. If one is taking an SSRI and it does not seem to be working and they happen to be taking an NSAIDs, one might want to change to a different class of antidepressant or evaluate the need for the NSAIDs. (*Medline Plus*, April 25, 2011)

Interesting information on estrogen and efficacy

"The current recommendation for menopausal hormonal treatment is to take estrogen at the lowest dose for the shortest duration of time to manage bothersome symptoms of menopause, such as hot flashes and night sweats. Clinicians have a wide variety of estrogen products from which to choose, including oral tablets, trans-dermal patches, topical sprays, gels, lotions, vaginal creams, tablets, and rings. The choice of therapy is often based on patient preference; prescription tracking has shown that women in the United States usually prefer oral estrogen dosage forms. To further complicate the issue of product selection, a wide variety of dosage forms and chemical entities exist among oral estrogens, each with unique product characteristics and pharmacokinetics that may influence their effects in women. The first question a clinician should ask a woman who is taking oral estrogen and who is noticing a change in efficacy (breakthrough hot flashes) in a previously stable estrogen regimen is whether they have started to take their medication with food. While some studies have shown that when estrogen is taken with a high-fat meal there is no impact, other studies reported decreases in maximum concentration ranging from 3% to 36% in subjects in a fed (as compared to fasting) state. While these slight changes in absorption may not have statistical relevance, a panel of experts speculated that they may prove to be the reason some patients experience breakthrough hot flashes and night sweats when taking their estrogen. So, before changing medication, dose, or route, simply not taking their medication with meals might be the solution. A 5% decrease in one patient due to food could be enough to drop her estrogen levels below the threshold for clinical efficacy. It is important in this day and age when estrogens are taken at such a low dose, that rather than increasing the dose and possibly overcompensating, improved efficacy could be achieved as simply as not taking their medication with food. P.S. Efficacy can also be lowered by smoking." (*The Female Patient,* May 2010)

Don't have your stroke on the weekend

"Stroke patients who enter the hospital at night and on weekends are more likely to die in the hospital than those treated during regular business hours and on weekdays, according to two studies presented at the American Heart Association International Conference 2008. More than 222,500 acute stroke admissions in 87 hospitals between 2003 and 2007 were reviewed, and the differences in mortality rates between after-hours and regular hours could not be explained by any obvious differences in the characteristics of the stoke or the patient. It appears the issue is quality of care based on staffing and the availability of specialists related to off hours." (*Nurse Week*, April 2008)

The need to standardize the clinical breast exam

"Studies do not provide great evidence to support the clinical breast exam (CBE). However, mammography misses 10%-20% of breast cancers in asymptomatic women. Further research is needed in the detection of breast cancer. In the meantime, clinicians must adopt the current recommended technique and help standardize the clinical breast exam. The vertical strips, (or lawn mower) pattern significantly increases search proficiency compared with the patterns used for years, which are the radial spokes and concentric circles. The vertical strips (lawn mower) pattern of examination has a search proficiency of 67.9% versus 44.7% for the radial spokes pattern and 38.4% for the concentric circles. The highest recorded sensitivity in human studies was 69% when the examiners took between 5 to 10 minutes to complete the examination of both breasts. Failure to diagnose breast cancer is the leading reason for malpractice claims, and primary care clinicians account for one half of the indemnity payments made. For standardization, a clinical breast exam should consider the following: the ideal time for the exam is from day 5 to 10 after the onset of menses; the importance of inspection is unproved; it is suggested that for asymptomatic women, the CBE should be the focus. If the patient is symptomatic, or an abnormality is discovered during palpitation, careful inspection should be added. The exam should start with the patient sitting with the hands pushing tightly on the hips to contract the pectoral muscles. This will aid in identification of asymmetry in breast shape or contour, and skin changes such as erythema, retraction, dimpling, or nipple changes. The lymph nodes should also be palpated while the patient is in the sitting position. There are 4 sets of axillary nodes, and a referral is indicated for any newly identified nodes, or those that are firm, large, tender, or fixed. In examining the breast lying down the Cahan position is ideal in spreading the breast tissue more evenly over the chest wall. The Cahan position involves having the patient roll onto her contralateral hip, rotate her shoulders back into the supine position, and place her ipsilateral hand on her forehead. For the CBE, begin in the axilla in a straight line down the mid–axillary line to the bra line, going up and down between the clavical and bra line to examine all breast tissue overlapping the rows. Remember to be especially vigilant palpating the upper outer quadrant, as breast cancer occurs more frequently there (41% followed by 34% behind the nipple). Not every new or old physician has been taught, or is now doing the CBE as outlined in what is now the best evidence-based practice, but until proven otherwise what is worth doing is worth doing well." (*The Journal for Nurse Practitioners*, May 2008)

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~Interesting Tidbits~

Take the patient's legs out of stirrups for the pap and you will reduce stress and still get a good specimen~ In this study the patient's feet were put on the edges of the exam table and out of stirrups. The result was the patient was much less tense and the quality of the specimens was the same. (*The Clinical Advisor*, July 2007)

Tripod sign for back pain~ In evaluating the patient with low back pain, one may find the tripod sign helpful. The tripod sign is elicited by asking the patient with low back pain while seated to raise their legs 45-60 degrees. Under these circumstances one with pathology will use his arms to brace himself. Patient's seeking drugs typically will just sit there unless they have been coached by someone to grab their legs with their arms. (*The Clinical Advisor*, July 2007)

DES lawsuit~ In 1979, DES daughter Joyce Bichler, who experienced clear cell adenocarcinoma (CCA) at the age of 18, filed the first lawsuit against Eli Lilly, the primary manufacturer of DES. (*Advance for Nurse Practitioners*, August 2009)

In pain? Try crossing your arms~ Crossing your arms across the middle of one's body confuses the brain and apparently can reduce the intensity of pain as reported in a recent pain journal. They think the reason for the phenomenon is conflicting information between two of the brain's maps, one for the body and one for external space. Crossed arms changes the mapping, possibly making the stimuli of pain perceived weaker (*MedlinePlus*, May 20, 2011)

DES exposure generations ago is still a problem

"To many providers, DES is a non-issue now that most DES children, the offspring of mother's who took DES, are past childbearing age. But DES continues to be a relevant health concern. Studies are emerging about the grandchildren of the original DES mothers. From 1938 until 1971, DES was marketed as a 'pregnancy vitamin' and sure cure for spontaneous abortions, prematurity, intrapartal bleeding, and diabetes. Thousands of unsuspecting women took this synthetic estrogen compound throughout their pregnancies, believing they were fostering good health in their babies. Years later, the devastating effects of DES are still being identified. There were seventy-eight different branded DES products identified, and many DES mothers were not even aware of which ones they took. Prescription records have been long lost ,and there is no nationwide system to notify women of their DES exposure. In 2004 the CDC published updates to re-educate providers about screening for DES exposure. The CDC also created a website ((www.cdc.gov/DES) which provides resources including a self-assessment guide for women who are unsure whether their mothers took DES. The known risks to women who took DES during pregnancy are that they face a 30% higher-than-average risk for breast cancer, and their daughters face double the breast cancer risk. This breast cancer risk to the daughters of DES-exposed women increased 2.5 times after they turned 40. DES is also linked to clear cell adenocarcinoma, which is a rare cancer of the vagina or cervix. DES-exposed women also have a number of anatomical and cellular abnormalities that are particularly observable on colposcopic examination. Dysplasia and squamous intraepithelial lesions occur in greater numbers in DES daughters as well. There appears to be a two-fold increase in high grade squamous intraepithelial lesions (HSIL) in DES daughters of all age groups. Additional gynecologic issues for DES-exposed women include menstrual irregularities, infertility, premature birth risk, a higher miscarriage rate and increased risk for ectopic pregnancies. The incidence of prematurity in DES daughters is three times higher than in unexposed women, and the risk of miscarriage or ectopic pregnancy is four times higher. DES-exposed women appear to have a slightly earlier menopause, possibly due to a lesser number of ovarian follicles at birth. A study of 1,753 women of childbearing age found that 24% of DES daughters had never become pregnant. The rate in unexposed women is 18%. It appears that the timing of the DES ingestion in the mother's pregnancy also plays a role in the degree of infertility. An increased incidence of postpartum hemorrhage in DES-exposed women, as well as very thin lower uterine segments, has been documented. A higher incidence of uterine contractility and cervical incompetence has also been noted. Reproductive tract abnormalities are common in DES daughters. The uterine cavity may be an abnormal shape or size. Additional changes include a hooded or rimmed cervix called a cockscomb cervix. This occurs in about 20% of DES daughters. The potential for increased autoimmune disease is under study. Anecdotal self-reports on DES chat lines include an increased incidence of thyroid disease and autoimmune disorders. Other disorders, such as early osteoporosis, dental hypoplasia, birth defects, and hypopituitarism have been reported. DES sons face a lifelong increased risk for testicular cancer. Prostate cancer risk may be increased, but this is unclear. DES granddaughters have more irregular periods, take longer to achieve menstrual regularity, and may have greater infertility and fewer live births. DES grandsons may face an increased risk for hypospadias. Since DES was still taken in 1971, the final DES daughters may be as young as 40, and obviously the grandchildren are in the reproductive age." (*Advance for Nurse Practitioners*, August 2009)