**KAYNAKLAR**

Akalın, H.E. (2006). Hasta güvenliği açısından hastane infeksiyon kontrolü. *Hastane İnfeksiyonları Dergisi,* 10, 16-18.

Akkan, G. (2007). İlaç Uygulama Yolları. (t.y.). Erişim: 06.10.2011 <http://www.ctf.edu.tr/farma/gokhanakkan/g02_ilacuygulama.pdf>

Alparslan, Ö., Erdemir, F. (1997). Pediatri servislerinde kullanılan antibiyotiklerin sulandırılması, saklanması ve hastaya verilmesi konusunda hemşirelerin bilgi ve uygulamalarının belirlenmesi. *Cumhuriyet Üniversitesi Hemşirelik Yüksekokulu Dergisi,* 1(1), 41-52.

Ashby, D.A.(1997). Medication calculation skills of the medical-surgical nurse. *Medsurg Nursing,* 6, 90–94.

Aslan, Ö., Ünal, Ç. (2005). Cerrahi yoğun bakım ünitesinde parenteral ilaç uygulama hataları. *Gülhane Tıp Dergisi*, 47(3), 175-178.

Aştı, T., Taşocak, G. (1995). Klinik Eğitimde Farklı Bir Yaklaşım. *Hemşirelik Bülteni*, 9(35), 7-17.

Aştı, T., Acaroğlu, R. (2000). Hemşirelikte sık karşılaşılan hatalı uygulamalar. *Cumhuriyet Üniversitesi Hemşirelik Yüksekokulu Dergisi*, 4(2), 1-6.

Aştı, T., Kıvanç, MM. (2003). Ağız yoluyla ilaç verilmesine ilişkin hemşirelerin bilgi ve uygulamaları. *Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi,* 6 (3), 1-9.

Ayık, G., Özsoy, A. S., Çetinkaya, A. (2010). Hemşirelik öğrencilerinin ilaç uygulama hataları. *İstanbul Üniversitesi Florence Nıghtıngale Hemşirelik Yüksekokulu Dergisi*, 18 (3), 136-143.

Aygin, D., Cengiz, H. (2011). İlaç uygulama hataları ve hemşirenin sorumluluğu. *Şişli Etfal Hastanesi Tıp Bülteni*, 45(3), 110-114.

Barker, K.N.,Flynn, E.A., Pepper, G.A., Bates, D.W., Mikeal, R.L. (2002). Medication error sobserved in 36 healthcare facilities. *Arch Intern Med,* 162, 1897-1903.

Bayne, T., Bindler, R. (1988). Medication calculation skills of registered nurses, *Journal of* Continuing *Education in Nursing,* 2(5), 34–36.

Bindler, R., Bayne, T.(1991). Medication calculation abılıty of registered nurses, IMAGE; *Journal of Nursing Scholarship,* 23(4), 221-224.

Birol, L. (2005). Hemşirelik Süreci. Etki Matbaacılık, 7. baskı, İzmir, 21-31.

Blais, K., Bath, J.B. (1992), Drug calculation errors of baccalaureate nursing student, *Nurse Educator,* 17(1), 12–15.

Bliss-Holtz, J., (1994). Discriminating types of medication calculation errors in nursing practice. *Nursing Research*, 43(6), 373–375.

Brady, A.M., Malone, A. M., Fleming, S. (2009). A literature review of thein dividualand systems factors that contributeto medication errors in nursingpractice. *Journal of Nursing Management*, 17, 679-697.

Calliari, D.(1995). The relationship between a calculation test given in nursing orientation and medication errors. *Journal of Contunuing Education in Nursing,* 26(1), 11-14.

Capriotti, T. (2004). Basic concepts to prevent medication calculation errors. *Dermatology Nursing,* 16(3), 245-248.

Cingi, İ.M., Erol, K. (1996). “Farmakoloji”. Erdoğan, M. (Ed.). T.C. Anadolu Üniversitesi Yayınları No: 494, Açıköğretim Fakültesi Yayınları No: 223.

Chang, K.Y., Mark, B. (2009). Antecedents of severe and nonsevere medication errors. *Journal Of Nursing Scholarship,* 41(1), 70-78.

Clancy, J., McVicar, A., Bird, D. (2000). Getting it right? An exploration of issues relating the to biological sciences in nurse education and nursing practice. *Journal of Advanced Nursing,* 32, 1522–1532.

Courtenay, M. (1991). A study of the teaching and learning of the biological sciences in nurse education*. Journal of Anvanced Nursing,* 16(9), 1110–1116.

Craig, G.P., Sellers, S.C. (1995). The effects of dimensional analysis on themedication dosage calculation capabuliting of nursing student. *Nurse Edicator,* 20(3), 14-18.

Craven, R.F.,Hirnle, C.J (2009). Fundamentals of Nursing: Human HealthandFunction. Sixth Edition. Philadelphia: Lippincott Williams&Wilkins, 494-530.

Çavuşoğlu, H. (2008). Çocuk Sağlığı Hemşireliği. Sistem Ofset Basımevi, 8. Baskı, Ankara. 2. Cilt. ss: 253-256.

Çırpı, F., Merih, D.Y., Kocabey, Y.M. (2009).Hasta güvenliğine yönelik hemşirelik uygulamalarının ve hemşirelerin bu konudaki görüşlerinin belirlenmesi. *Maltepe Üniversitesi Hemşirelik Bilim ve Sanatı Dergisi,* 2(3), 26-34.

Dilles, T., Vander Stichele, R.H., Van Bortel, L., Elseviers, M.M. (2011). The Nursing student’s pharmacological knowledge and calculation skills Ready for practice?. *Nurse Education Today,* 31, 499-505.

Ellen, O’Shea (1999). Factor contributing to medication errors: a literature review. *Journal of Clinical Nursing,* 8, 496-504.

Ertem, G., Oksel, E., Akbıyık, A. (2009). Hatalı tıbbi uygulamalar (malpraktis) ile ilgili retrospektif bir inceleme. *Dirim Tıp Gazetesi*, 84(1), 1-10.

FDA, Food and Drug Administration. <http://www.fda.gov/CDER/drug/MedErrors/default.htm> *Erişim tarihi:* 21.10.12

Garnerin, P., Pellet-Meier, B., Chopard, P., Perneger, T., Bonnabry, P. (2007). Measuring human-error probabilities in drug preparation: a pilot simulation study. *Eur J Clin Pharmacol*, 63, 769–76.

Grandell-Niemi H, Hupli M, Leino-Kilpi H, Puukka P (2001). Medication calculation skills of graduating nursing students in Finland, *Advances in Healt Sciences Education,* 6, 15–24.

Grandell-Niemi H, Hupli M, Leino-Kilpi H, Puukka P (2003). Medication calculation skills of nurses in Finland. *Journal of clinical nursing,* 12, 519–528.

Grandell-Niemi, H.,Hupli, M., Leino-Kilpi, H., Puukka, P. (2005). Finnish nurses’ and nursing students’ pharmacological skills. *Journal of Clinical Nursing,* 14, 685–694.

Grandell-Niemi H, Hupli M, Leino-Kilpi H, Puukka P (2006). Finnish nurses and nursing students mathematical skills, *Nurse Education Today*, 26, 151–161.

International Council of Nurses. Definition Of Nursing. *Erişim: 31 Ağustos 2011.* [*http://www.icn.ch/about-icn/icn-definition-of-nursing/2010*](http://www.icn.ch/about-icn/icn-definition-of-nursing/2010)*.*

Ives, G., Hodge, K., Bullock, S., Marriott, J. (1996). Fırst year RNs’actual and self rated pharmacology knowledge. *Avustralian Journal of Advanced Nursing,* 14, 13-19.

Hamner, S.B., Morgan, M.E. (1999). Dosage calculation testing for competency in ambulatory care. *Journal for Nurses in Staff Development*, 15, 193-197.

Hsaio, G. -Y., Chen, I. -J., Yu, S., Wei, I.-L., Fang, Y.-Y., Tang, F. –I. (2010). Nurses’ knowledge of high-alert medications: instrument development and validation. *Journal of Advanced Nursing,* 66(1), 177–190.

Hutton, B.M. (1998). Do school qualifications predict competence in nursing calculations?. *Nurse Education Today,* 18, 25-31.

Hutton, B.M. (2005). Calculations for new prescribers. *Primary Health Care,* 15(1), 44-50.

Hutton, B.M. (2009). Numeracyand drug calculations in practice. *Primary Health Care*, 19(5), 40-45.

Joint Commission on Accreditation of   
Healthcare Organizations. (2006). Sentinel Event Statistics, [www.jointcommission.org/Library/T M\_ hysicians/ mp\_11\_06.htm](http://www.jointcommission.org/Library/T%20M_%20hysicians/%20mp_11_06.htm).

Kadam, A.M., Ganachari, M.S., Bhise, S.B., Gurunath, S. (2009). Medication errors related to antibiotics in medical ıntensive care unit in a tertiary care teaching hospital in south ındia: a prospective study. *Journal of Pharmacy Research*, 2(8), 1245-1248.

Kaushal, R., Bates, D., Landrigan, C. (2011). Medication errors and adverse drug events in pediatrics inpatients. *The Journal of the American Medical Association*, 285(16), 2114-2120.

Karadağ, A. (2009). Hemşireler İlaç Hatalarını Önlemede Anahtar Kişi (mi) dir? Erişim: 10/12/2011. <http://www.turkhemsirelerdernegi.org.tr/menu/saglik-guncel/thd-sagligin-sesi-yazilari/hemsireler-ilac-uygulama-hatalarini-onlemede-anahtar-kisi-mi-dir.aspx>

Kayalp, S.O. (2005). Rasyonel Tedavi yönünden Tıbbi Farmokoloji (s. 3-9). 12. Baskı. Ankara: Feryal Matbaacılık.

King, R.L. (2004). Nurses’ perceptions of their pharmacology educational needs. *Journal of Advanced Nursing,* 45(4), 392‑400.

Koç, Z., Bal, C., Sağlam, Z. (2010). Kız hemşirelik öğrencilerinin erkek hemşirelik öğrencilerine bakış açısı. *Maltepe Üniversitesi Hemşirelik Bilim ve Sanatı Dergisi, Sempozyum Özel Sayısı,* 330-334.

Kohn, L.T., Corrigan, J.M., and Donaldson, M.S, editors. (1999). To Err is Human: Building a Safer Health System. Institute of Medicine, National Academy Press, Washington, D.C.

Korkmaz Ö.Y. İlaç Güvenliği*. Hemşirelik Haftası Programı.* Erişim: 11/12/2011. http:// [www.samsun.saglik.gov.tr/ppt/sunu3.ppt](http://www.samsun.saglik.gov.tr/ppt/sunu3.ppt).

Latter, S., Rycroft-Malone, J., Yerrell, P., Shaw, D. (2000). Evaluating educational preparation for a health education role in practice:the case of medication education. *Journal of Advanced Nursing*, 32, 1282-1290.

Latter, S., Rycroft-Malone, J., Yerrell, P., Shaw, D. (2001). Nurses’ Educational Preparation For Medication Education Role: Findings From National Survey. *Nurse Education Today*, 21, 143-154.

Lerwill, C. J.(1999). Ability and Attitudes to Mathamatics of post-registration health-care Professionals. *Nurse Edication Today*, 19, 319-322.

McDowell, E. S.,Ferner, S. H., Ferner, E. H. (2009). The patho physiology of medication errors: how and where the yarise. *British Journal of Clinical Pharmacology,* 1365-2125.

McMullan, M., Jones, R., Lea, S. (2010). Patient safety: numerical skills and drug calcutation abilities of Nursing students and Registered Nurses. *Journal of Advanced Nursing,* 66(4), 891-899.

National Patient Safety Foundation, July 2003, [www.npsf.org/](http://www.npsf.org/)

*NCCMERP, About Medication Errors.* [*www.nccmerp.org/aboutMedErrors.html*](http://www.nccmerp.org/aboutMedErrors.html)*, Erişim tarihi: 31.08.2011*

Oktay, Ş., Kayalp, S.O. (2005).İlaç uygulama yolları ve uygulama yerinden absorpsiyon. Kayaalp, S.O. (Ed.). Rasyonel Tedavi Yönünden Tıbbi Farmakoloji (s. 16-31). 12. baskı.Ankara: Feryal Matbaacılık.

Rainboth, L.,Demasi, C. (2006). Nursing students’ mathematic calculation skills. *Nurse Education in Practice,* 6, 347-353.

Resmi Gazete (1954). *6283 sayılı Hemşirelik Kanunu,* 25.2.1954 , 8647.

ResmiGazete (2007). *5634 sayiliHemşirelikKanunu,* 2.5.2007, 26510.

Roykenes, K.,Larsen, T. (2010). There lationship between nursing students’ mathematic sabilityand their performance in a drugcalculation test. *Nurse Education Today*, 30, 697–701.

Sabuncu, N., Alpar, Ş., Atalay, M. (1997). Hemşirelik Esasları El Kitabı, Birlik Ofset Ltd.Şti., 1. Baskı, İstanbul, s: 95-113.

Searl, K-R.,Moxham, L., Walker, S., Happell, B. (2010). Nursing student sadministering medication: appreciatin gandseeking appropriate supervision. *Journal of Advanced Nursing,* 66(3), 532–541.

Segatora, M., Edge, D.S., Miller, M. (1993). Posology Errors by Sophomore Nursing Students. *Nursing Outlook*, 41(4), 160-165.

Sever, L. (1999). Çocuklarda ilaç kullanımı. İstanbul Üniversitesi Cerrahpaşa Tıp Fakültesi Sürekli Tıp Eğitimi Etkinlikleri Akılcı İlaç Kullanımı Sempozyumu, İstanbul. s: 77-85.

Sherriff, K., Wallis, M., Burston, S. (2011). Medication calculation competencies for registered nurses: a literature review. *Australıan Journal Of Advanced Nursıng,* 8(4), 75-83.

Süzer, Ö. (2011). Farmakolojiye giriş, ilaçların şekilleri ve uygulama yolları. (t.y.).Erişim:14/02/12.<http://www.ctf.edu.tr/farma/onersuzer/pdf/tr/28_Farmakolojiye_giris.pdf>

Tang, F.I.,Sheu S.J., Yu, S., Wei, I.L., Chen, C.H. (2007). Nurses relatethe contributing factorsin volved in medication errors. *Journal of Clinical Nursing*, 16, 447–457.

Tarnow, K., Werst, L., (2000). Drug calculation examinations: do calculators make a difference?. *Nurse Educator*, 25(5), 213– 215.

Tissot, E., Cornette, C., Limat, S., Mourand, L.J., Becker, M., Etievent, P.J., Dupond, L.J., Jacquet, M., Woronoff-Lemsi, C.M. (2003) Observational study of potential risk factors of medication administration errors. *Pharmacy World and Science,* 25, 264–268.

Tosun, N., Oflaz, F., Akyüz, A., Kaya, T., Yava, A., Yıldız, D., Akbayrak. N. (2008). Hemşirelik Yüksek Okulu öğrencilerinin intörn eğitim programından beklentileri ile program sonunda kazanım ve önerilerinin değerlendirilmesi. *Gülhane Tıp Dergisi*, 50, 164-171.

Warburton, P. *et al* (2010). An evaluation of an online numeracy assessment tool. *Nursing Standard.* 24(30), 62-68.

Weeks, K., Lyne, P., Torrance, C., (2000). Written drug dosage errors made by students: the threat to clinical effectiveness and the need for a new approach. *Clinical Effectiveness in Nursing,* 4, 20–29.

White, A. (1993). Pharmacology for nursing practice. *British Journal of Nursing*, 506-509.

Wolf, Z. R.,Hicks, R., Serembus, J. F. (2006). Characteristics of medication errors made by students during the administration phase: A descriptive study. *Journal of Professional Nursing,* 22 (1), 39-51.

Wolf, Z. R.,Hicks, R. W., Altmiller, G., Bicknell, P. (2009).Nursing student medication errors in volving tubingand catheters:A descriptivestudy. *Nurse Education Today,* 29, 681–688.

Woods, D., Thomas, E., Holl, J., Altman, S.,Brennan, T. (2005). Adverse eventsand preventable adverse events in children. *Pediatrics*, 115-155.

Wright, K. (2005). An exploration into the most effective way to teach drug calculation skills to nursing students. *Nurse Education Today,* 25, 430-436.

Wright, K. (2006). Barriers to accurate drug calculations. *Nursing Standard*, 20, 28, 41-45.

Wright, K. (2007). Student nurses need more than maths to improve their drug calculating skills. *Nurse Education Today*, 27, 278-285.

Wright, K. (2008a). Drug calculations part 1: a critique of the Formula used by nurses. *Nursing Standard*, 22 (36), 40-42.

Wright, K. (2008b). Drug calculations part 2: alternative strategies to the formula. *Nursing Standard,* 22(37), 42-44.

Yaraş, G. (2007). Hemşirelik öğrencilerinin ilaç dozu hesaplama becerilerinin değerlendirilmesi. Yayımlanmamış Yüksek Lisans Tezi, Cumhuriyet Üniversitesi Sağlık Bilimleri Enstitüsü Hemşirelik Programı, Sivas.