



## Building Evidence-Based Practice in Resource Limited Settings: Exemplars of success

<b>Salem Al Touby</b>	RN, PhD, DHA, MCN Dean, Oman Nursing Institute, Ministry of Health P. O. Box: 3720, Ruwi Postal Code: 112 Sultanate of Oman
<b>Elaine Larson</b>	RN, PhD, FAAN Anna C. Maxwell Professor of Nursing Research and Associate Dean for Research Columbia University School of Nursing
<b>Samar Noureddine</b>	RN, PhD, FAHA, FAAN Professor and Assistant Director for Academic Affairs
<b>Roa Altaweli</b>	PhD, MSc, BSc, RM, RN East Jeddah Hospital, Ministry of Health Jeddah, Saudi Arabia
<b>Elham Al Naghabandi</b>	BSN, MSN, DSN Vice Dean Post Graduate Studies King Abdulaziz University College of Nursing
<b>Nagla Abdel Aziz El Seesy</b>	DNS Lecturer, Nursing Administration Department Faculty of Nursing, Alexandria University
<b>Nesreen Fathy</b>	RN, MSN, Doctoral candidate Head of Nursing Research, Research Department, Children's Cancer Hospital Egypt (CCHE 57357). Cairo, Egypt.
<b>Fadma Abubakar</b>	RN, RM, MSN, MPH Dean, School of Nursing and Midwifery Amoud University, Borama, Somaliland
<b>Radhwan Hussein Ibrahim</b>	PhD, Msc Professor of Community Health Nursing University of Mosul.College of Nursing, Iraq

### ABSTRACT

**Background.** To improve quality and access to healthcare, clinical nursing and midwifery scholarship must provide the solid evidence base for interventions and best care practices that is appropriate and specific for various regions and cultures.

**Aims.** To describe successes as exemplars for building evidence-based practice (EBP) in the face of challenging conditions and limited resources in the Eastern Mediterranean Region.

**Methods.** Nurse experts attending a clinical nursing and midwifery research summit in Amman, Jordan presented seven exemplars from their region on translating research into practice.

**Findings.** Exemplars discussed developing systems and strategic plans for clinical nursing research as well as establishing a department within a health care facility that focused on translation and implementation of research in practice.

**Discussion.** Findings reflect the strong belief of nurse leaders in the Eastern Mediterranean Region of the importance of establishing a rich culture of EBP and moving the agenda forward through taking active steps to create a platform based on health priorities.

Linking evidence to action. Success stories presented from six nations highlight the importance of clinical nursing research to advance EBP and quality patient care.

The challenges addressed by these stories suggest the need to develop national and institutional strategic plans, funding, and preparation of qualified nurses to conduct clinical nursing research for EBP.

**Conclusions.** Challenges faced by the nursing workforce to conduct and use clinical nursing research and implement EBP are similar across the globe, but even in regions that have fewer resources and major challenges, EBP can be implemented.

**KEYWORDS :** Clinical research; Developing countries; Middle East; Evidence-based practice; Midwifery

The World Health Organization (WHO) member states are divided into six regions facilitated by a regional office. One of the regions is the Eastern Mediterranean Region (EMRO), which includes Afghanistan, Bahrain, Djibouti, Egypt, the Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, the Occupied Palestinian territory, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, and Yemen (WHO, 2016a). Within the Region, member states are also divided into income categories based on the World Bank income levels including low, middle, and high income countries (WHO, 2016b). This disparity in income categories creates a challenge in the quest to meet the WHO Millennium Development Goals for the Region.

According to Harrowing, Mill, Spiers, and Kipp (2010), the generation of sound scientific nursing knowledge is dependent on high-quality research to inform practice that aids in the

achievement of the Millennium Development Goals. Further, income categories need to be considered by nurses when planning global research, as Western biomedical research principles may not be applicable in low-income countries, thus calling for nurses to be aware of the social context, values, and culture of the proposed settings when studies and implementation strategies are designed. Nurse leaders in countries in the EMRO region strive to generate scientific nursing knowledge, but are challenged with the diversity of the member states within the Region. The initiatives of EMRO member states to create a platform for evidence-based practice (EBP) constitute a story worth telling and learning from.

### Methods

In order to improve quality and access to healthcare, clinical nursing and midwifery scholarship must provide the solid evidence base for interventions and best care practices, which are appropriate and specific for various global regions and cultures. To contribute to this

goal in the EMRO Region, a Summit "Moving the Agenda Forward for Nursing and Midwifery Clinical Research in the Eastern Mediterranean Region" was convened in July 2016 in Amman, Jordan. The Summit was designed to foster regional and international relationships for collaboration and sharing of resources and expertise in order to increase clinical scholarly capacity and to shift the regional agenda to critical priority needs for EBP as established by regional clinical nursing and midwifery experts. The Summit was planned by nursing experts from the Region in collaboration with Columbia University School of Nursing, and funded by Columbia University President's Global Innovation Fund. Collaborators included the School of Nursing at the University of Jordan, Faculty of Nursing at Jordan University of Science and Technology, Jordanian Nursing Council, Nursing Department, Faculty of Nursing at Badr University in Cairo, Rafic Hariri School of Nursing of the American University of Beirut, King Abdulaziz University College of Nursing, and the WHO EMRO.

There were 37 nursing leaders who participated from 13 of the 22 regional countries and the United States, most of whom had previously completed a Delphi survey to establish regional clinical nursing and midwifery EBP priorities. In the course of the Summit, several attendees across the Region shared 'success stories' of developing, planning, and conducting scholarly clinical EBP projects under difficult conditions such as internal conflicts and war and lack of resources and research expertise.

Evidence-based practice, "the use of the best scientific evidence integrated with clinical experience and incorporating patient values and preferences, in the practice of professional patient care" (Houser & Oman, 2010, p.1), is essential to bridge the gap between clinical research and improved practice. The aim of this paper is to describe successes as exemplars for building EBP in the face of challenging conditions and limited resources. Here we present success stories from nurses in six countries in the Eastern Mediterranean Region.

#### **Egypt (Fathy)**

Nurse researchers in Egypt face many complex challenges in developing their roles and careers. Although the ultimate purpose of nursing is to provide high-quality patient care, nursing research in Egypt until the present time has been primarily conducted in the academic setting. However, as Poston & Buescher (2010) pointed out, nurses are at the fulcrum of direct patient care and need a comprehensive understanding of the specialty in which they are working and extensive knowledge of the EBP process as well as a variety of computer-based skills.

In response to the need for data to inform nursing practice, The Children's Cancer Hospital Egypt, with a vision to be the unique worldwide icon of change towards a cancer-free childhood, developed the first regional hospital-based clinical Nursing Research and Evidence-Based Practice Department. The Department adopted a philosophy of 'action research'. Stringer (1996) stressed the importance of using user-friendly language rather than technicalities and complexities found in traditional scientific research. He characterized action research as repeated cycles of 'look, think, act', in which looking represents information gathering, thinking represents exploring, analyzing, interpreting and explaining, and acting is the stages of planning, implementing and evaluating. Similarly, McNiff (1993) structured her discussion of action research around the steps of problem-solving.

Therefore, the Nursing Research and Evidence-Based Practice Department started from this point to solve clinical nursing problems. This led to our first project to develop a specialized central venous catheter nursing team in pediatric oncology setting and determine the effect on the incidence of infection. Many children with cancer require frequent administration of medications and blood draws from an intravenous line, so port-a-catheters are used for this purpose. After implementation of the specialized central venous catheter nursing team there was a significant reduction in the rate of port-a-catheter removal due to

infection. Results of this project, "Developing a Specialized Central Venous Catheter Nursing Team in Pediatric Oncology Setting" were presented at the International Conference on Cancer Nursing in 2012.

In order to expand the work of the Department, our next step is to establish a Nursing Research and Evidence Based Practice Committee to facilitate an EBP culture; support and promote nurses' engagement in the process; disseminate findings; generate an environment that enables and encourages nurses to conduct research, audit, and quality improvement; and enhance synergy between the nursing researchers, nursing practice and the hospital mission. Membership includes 15 voting members (e.g., chief nursing officer, clinical nursing staff, managers, specialists and educators) as well as the Chief Executive Officer.

Finally, many of the oncology patients are treated on medical research protocols but the nursing care of these patients is often not clearly defined in these protocols. The Department develops evidence-based nursing care guidelines to increase the understanding of the protocols, decrease the potential for errors and practice deviations, standardize nursing care, and create standards of excellence for care for treatment protocols.

While nurse researchers can play an important role in evolving nursing knowledge and facilitating EBP, it was necessary that support be available in the clinical setting. The Nursing Research and Evidence Based Practice Department is providing a structure and support system to build EBP for vulnerable children in this oncology hospital.

#### **Iraq (Ibrahim)**

In 1933, the first official nursing school was opened in Baghdad (Garfield & Martone 2003). Under the aegis of WHO, the College of Nursing at the University of Baghdad was established in 1962. The need for qualified faculty members motivated the College of Nursing in 1986 to open a master's program in various specialties [Community Health, Medical-Surgical, Mental Health, and Maternal-Child Health Nursing (Boyle, 1989)]. After 2003 and the second Gulf War, the status of Iraqi nursing was low and reflected the isolation, neglect and conflict that have been the fate of the country over the previous three decades (WHO, 2008). The WHO EMRO invited nursing stakeholders from various Iraqi provinces with different backgrounds to convene to discuss this situation.

As a result, a 5-year (2003-8) formal National Strategy and Plan of Action for Nursing and Midwifery Development in Iraq was developed and more than 15 nursing colleges were established within Iraqi universities. Further, two levels of basic nursing education were adopted and all other levels were closed. The societal image and attitudes toward nursing has also changed. Nurses' salaries were raised from less than \$10 to \$800-1500 per month. The female/male ratio among students is now 3:1 and nursing students have high ranking scores in baccalaureate examinations.

#### **Kingdom of Saudi Arabia**

**Exemplar 1** (Altaweli). According to Thorp (2008) it is important to understand what influences healthcare professionals' behavior and decision-making using qualitative methods. Changing established clinical practice is problematic (Belizán, Meier, Althabe, Codazzi, Colomar, Buekens, et. al., 2007), and there is no definitive proof that evidence will change healthcare professional practice, no matter how clearly formulated, designed and provided to them (Thorp, 2008). The implementation of guidelines by healthcare professionals and health system managers is inconsistent and gaps remain between recommended care and clinical practice (Flodgren, Conterno, Mayhew, Omar, Pereira, & Shepperd, 2013). Nevertheless, the experience described below demonstrated to me the effectiveness of using EBP.

The UK National Institute for Health and Clinical Excellence

recommends that the separation of a woman and her baby within the first hour of the birth be avoided and that women be encouraged to have skin-to-skin contact with their babies as soon as possible after the birth (NICE, 2015, p16). The WHO (2013) further recommends that newborn bathing be delayed until 24 hours after birth. If this is not possible due to cultural reasons, bathing should be delayed for at least six hours to avoid a high incidence of hypothermia.

As a post-graduate student I was assigned to a labour and delivery room and had an opportunity to change the routine midwifery practice of bathing newborns immediately after birth. I noted that during a 3-month period, 78% of 130 neonates in the neonatal intensive care unit were hypothermic. In the process of observational research I also identified a number of factors potentially associated with this hypothermia, including lack of awareness among the staff of the risk of hypothermia; shortage of equipment (radiant heaters), linen and towels; a very cold ward environment; weighing the baby immediately after birth without clothing; work overload; inadequate communication between staff and relatives; and bathing the newborns immediately after birth. When asked, the staff reported that it was not possible to lower the ambient temperature in the labour and delivery rooms because of the central air conditioning. After analyzing the data and identifying the problem, I recommended some solutions to promote thermal regulation of newborns.

During my placement in the labour and delivery room, the midwives began to delay bathing the baby until the mother was transferred to the postnatal ward, covering the baby with a dry, warm towel and allowing skin-to-skin contact and breastfeeding within one hour after birth if accepted by mothers. These practices have now become a standard of care. EBP has been proposed as an important tool for improving the quality of maternity care (Turan, Bulut, Nalbant, Ortaylı, & Erbaydar, 2006), and this project helped me develop the ability to identify problems from the work environment and identify and implement solutions using EBP recommendations.

**Exemplar 2** (Al-Naqshabandi, El Seesy). My work involves considerable direct contact with expatriate nurses coming to work at King Abdulaziz University Hospital, Jeddah. My colleagues and I were concerned about the level of advocacy among these nurses toward Saudi patients and we translated this concern into a small project. Forty-six nurses on the oncology unit completed a tool which measured patient advocacy (Bu & Jezewski, 2007). High scores were found on items related to acting on behalf of patients but scores were lower on attitudes to champion social justice for patients.

We determined that in order to care for Muslim patients appropriately, transcultural nursing informative sessions were needed during the orientation of expatriate nurses, as well as at intervals throughout their time in Saudi Arabia. The participating nurses were very receptive to our encouragement regarding how they could deal with oncology patients, thus translating our concern to EBP and changing our orientation of new nurses to include cultural awareness and sensitivity. This study highlights important issues to be considered in hospital settings that recruit healthcare providers of diverse nationalities.

#### **Lebanon** (Noureddine)

Since one of the pre-requisites for developing scholarly clinical and research projects is advanced nursing knowledge and skills in research, one success story worth sharing is the advanced nursing education that occurred in Lebanon, a small country bordered by Syria and Israel that suffers perpetually from political, security and financial challenges. Nursing in Lebanon struggled for over 40 years to form its Order of Nurses in Lebanon, the national organization that regulates nursing practice and education, in 2002. Meanwhile, the law that governs nursing practice up to the present time stops short of acknowledging advanced practice nurses and designates three levels of nurses: the assistant nurse, the nurse trained in

technical programs, and the licensed/registered nurse prepared in a basic university program (El-Jardali, Hammoud, Younan & Salman, 2014). The Order of Nurses in Lebanon proposed a revised law adding the specialist nurse who is prepared at the graduate level with advanced practice, education, administration and research skills. The law has yet to get parliamentary approval.

Despite this, schools of nursing have proceeded to offer masters degrees that prepare nurses for advanced practice roles to meet the need for maintaining quality nursing care. A number of these graduates are making significant contributions to EBP. Some success stories in a tertiary care center that is one of the few to hire clinical nurse specialists include introducing EBP guidelines for managing patients with acute coronary syndrome and heart failure and monitoring related quality indicators. Other graduate nurses have conducted research in which the findings were used to improve practice, such as surveys of knowledge of nurses about pain management and diabetes, which resulted in developing continuing education programs for nurses in these areas (Abdul Rahman, Abu-Saad Huijer & Noureddine, 2013; Itani, Noureddine & Kantar, 2016). Others worked with multidisciplinary teams to study complications in select patient populations such as ventilator associated pneumonia (VAP) and success rates in resuscitation, and the results were used to develop VAP bundles and rapid response teams that are improving patient outcomes. Educating nurses at the graduate level and providing them with research skills allowed them to implement EBP in their clinical settings.

#### **Somalia** (Abubakar)

The majority of stillbirths occur in low-and middle income countries, primarily in low resource settings (McClure, Saleem, Pasha, & Goldenberg, 2009). Stillbirth is a highly emotional event and therefore a thesis was conducted by one of our nursing students to describe perceptions, care and reasons for losing a baby at birth based on Somaliland mothers' experiences. Seventy-five (75) women from one district of ~240,000 which includes 54 villages, one town, and three hospitals were surveyed during a visit to a maternity ward. All of the women had 2-5 pregnancies, almost two-thirds had one stillbirth and the others had 2-5 stillbirths. About half (54.7%) expressed satisfaction with staff support during the birthing and post-natal period, but those attended to in hospitals were significantly more likely than those with home births to express satisfaction with care (77.8% vs 20%, respectively,  $p < 0.05$ ). While the majority of women reported that they were not anxious or depressed, the project highlighted the huge problem of stillbirths in this low resourced country, the importance of staff support during the perinatal period, and the urgent need for more clinical nursing research and EBP in this area.

#### **Sultanate of Oman** (AlTouby)

As noted by Uneke, Ezeoha, Ndukwe, Oyibo, Onwe, and Aulakh (2013), research priority setting is an important method to strengthen health systems and contribute to the alignment of funding with national health needs identified by the evidence produced through research. In recognition of the importance of prioritizing health research, the Sultanate of Oman Ministry of Health conducted a strategic study of health research needs and published a booklet of health research priorities available through the official website of Oman Ministry of Health. Efforts to develop capacity, funding mechanisms, and proper utilization of recommendations to improve health care service delivery were made to ensure that a systemic health research directive is in place (Directorate of Research and Studies, 2014). This led all sectors of the Ministry of Health in Oman to put forth five year strategic health research plans. Among the important sectors is the clinical nursing services.

In 2012, a clinical nursing research group was established from all regions consisting of fifteen clinical nurses interested in research and EBP. A series of capacity building workshops were conducted to help the clinical nurses enhance their research skills. This led to three proposals for clinical nursing projects as well as preparing

regional trainers. Two national seminars were conducted in 2012 and attended by more than 700 nurses to explore priorities for clinical nursing projects and develop capacity (Directorate of Research and Studies, 2015). The impact of training clinical nurses to lead EBP initiatives is of benefit to both service delivery and patient care as these nurses will use their findings and make recommendations relevant to the health care environment (Misso, Ilic, Haines, Hutchinson, East, & Teede, 2016).

Following the success of the 2012 initiatives, the Directorate General of Nursing Affairs at the Ministry of Health, Oman gathered a second group of 25 clinical nurses from various regions in Oman for training. A second series of workshops were carried out, resulting in 14 submitted proposals, 12 of which received approval from the Research and Ethical Approval Committee at the Ministry of Health, Oman (Directorate of Research and Studies, 2015).

Capacity building for Omani nurses in EBP continued in 2014 with a two week workshop for a group of 14 nurses, one week of advanced training and another week on mentorship. In 2014 a proposal was submitted for ethical review for a study on "Nurse's Knowledge and Perception of the Oman Nursing and Midwifery Code of Professional Conduct". In 2015 four nursing clinical proposals received approval for funding from the Ministry of Health National Research Fund (Directorate of Research and Studies, 2015).

## Discussion

The success stories presented from six Eastern Mediterranean nations highlight the importance of clinical nursing research to advance EBP and quality patient care. Challenges faced by the nursing workforce to implement EBP are similar globally, and include developing national and institutional strategic plans, funding, and preparation of qualified nurses to conduct clinical nursing research and engage in dissemination and implementation science.

A major barrier to gathering the foundational information for best practices is funding. In two scoping reviews of the clinical nursing and midwifery research published the African nations as well as in the Eastern Mediterranean Region, we found an alarming gap between funded and published projects and the clinical priorities and major problems and needs identified by nursing experts in each region (Sun & Larson, 2015; Alhusaini, Sun, & Larson, 2016). With the challenges of limited resources and conflict within some of the EMRO states, it is important to ensure that strategic plans to address EBP are based on priorities rather than driven by the interests of funding sources. This is applicable globally as funding does take precedence over actual priorities in setting strategic plans for EBP; nurse leaders need to confront this through setting priorities earlier and negotiating with funding sources to map funding according to the set priorities.

The stories also highlighted the impact of clinical nursing research in improving patient outcomes. Although translating best evidence developed through rigorous clinical nursing research into action is challenging, nurses from the region found it rewarding when quality of patient care was enhanced through their translational efforts. As evidenced in particular by the exemplar from Egypt, nurses' attitudes toward implementation of EBP and the involvement of patients to enhance quality of care can be fostered through having a supportive system and management and a working environment that embraces the application of research in clinical practice (Jansson & Forsberg, 2016). Therefore, in any health setting across the world, translating best evidence to action is deemed satisfying for nurses.

The ability of these nations and health establishments to move the agenda forward for EBP relies on an investment in capacity building of the nurses' skill and competence in conducting clinical nursing research. Gibbs and Lowton (2012) discussed the importance of making available training and educational opportunities for clinical research nurses to help enable them to assume their role through

continuous professional development programs such as workshops, seminars, or conferences as well as formal post-graduate academic programs as masters and doctoral programs. This will enable nurses to conduct and translate clinical research. It is important that nurse leaders who face limited resources across the world to work on building nurses' skills and competence through continuous professional development programs. Sharing of best practices and learning from each other across the world will help build capacity with limited cost implications.

The outcomes of the Delphi survey discussed in the Amman Summit explored the importance of establishing regional research and EBP priorities to inform strategic planning for regional clinical nursing research. Several of the stories presented discussed developing systems, strategic plans for clinical nursing research, and went beyond to establish departments within health care facilities that focused on translation and implementation of research to practice. This reflects the strong belief of nurse leaders in EMRO region of the importance of establishing a rich culture of EBP and moving the agenda forward though taking active steps to create a platform based on health priorities. The willingness of the nations across the EMRO region to share, collaborate, and promote EBP is a global example of moving the nursing profession forward.

## References

1. Abdul Rahman, M., Abu-Saad Huijer, H., & Nouredine, S. (2013). Lebanese nurses' knowledge regarding pain management. *Lebanese Journal of Nursing*, 3, 10-12.
2. Alhusaini, M.A., Sun, C.J., & Larson, E.L. (2016). Clinical nursing and midwifery research in Middle Eastern and northern African countries: a scoping review. *Journal of Health Specialties*, 4(4), 238-245.
3. Belizán, M., Meier, A., Althabe, F., Codazzi, A., Colomar, M., Buekens, P., Belizán, J., Walsh, J. and Campbell, M.K. (2007). Facilitators and barriers to adoption of evidence-based perinatal care in Latin American hospitals: a qualitative study. *Health Education Research*, 22(6), 839-853.
4. Boyle, J. S. (1989). Professional nursing in Iraq. *Image: The Journal of Nursing Scholarship*, 21(3), 168-171. doi:10.1111/j.1547-5069.1989.tb00125.x
5. Bu, X. & Jezewski, M. (2007). Developing a mid-range theory of patient advocacy through concept analysis. *Journal of Advanced Nursing*, 57(1), 101-110.
6. Directorate General of Nursing Affairs DGNA (2015). *Advancing Nursing Research and Capacity Building, A summary Report 2012-2015*. Sultanate of Oman: Ministry of Health.
7. Directorate of Research and Studies (2014). *Health Research Priorities*. Directorate General of Planning, Sultanate of Oman: Ministry of Health. Retrieved September 16, 2016 from [www.moh.gov.om](http://www.moh.gov.om).
8. El-Jardali, F., Hammoud, R., Younan, L., & Salman, L. (2014). The making of nursing practice Law in Lebanon: A policy analysis case study. *Health Research Policy and Systems*, 12(1):52. DOI:10.1186/1478-4505-12-52.
9. Flodgren, G., Conterno, L.O., Mayhew, A., Omar, O., Pereira, C.R., & Shepperd, S. (2013). Interventions to improve professional adherence to guidelines for prevention of device-related infections. *Cochrane Database of Systematic Reviews*. 3. Art. No.: CD006559. DOI: 10.1002/14651858.CD006559.pub2.
10. Garfield, R., & McCarthy, C. F. (2005). Nursing and nursing education in Iraq: Challenges and opportunities. *International Nursing Review*, 52(3), 180-185. doi:10.1111/j.1466-7657.2005.00428.x
11. Gibbs, CL., & Lowton, K. (2012). The role of the clinical research nurses. *Nursing Standards: Official Newspaper of the Royal College of Nursing*, 26(27), 37-40. doi: 10.7748/ns2012.03.26.27.37.c8986.
12. Harrowing, J.N., Mill, J., Spiers, J., Kulig, J. & Kipp, W. (2010). Culture, context and community: ethical considerations for global nursing research. *International Nursing Review*, 57: 70-77. doi:10.1111/j.1466-7657.2009.00766.x.
13. Houser, J. & Oman, K.S. (2010) *Evidence-Based Practice*. Jones and Bartlett Publishers.
14. Itani, B., Nouredine, S., & Kantar, L. (2016). Knowledge of Diabetes Mellitus, A survey of registered Nurses. Abstract in Conference proceedings. *Development of Evidence Based Nursing in an Interdisciplinary Era: Achievements and Prospects*. October 6-8, 2016. Lebanon: American University of Beirut.
15. Jansson, I., & Forsberg, A. (2016). How do nurses and ward managers perceive that evidence-based sources are obtained to inform relevant nursing interventions? An exploratory study. *Journal of Clinical Nursing*, 25: 769-776. doi:10.1111/jocn.13095.
16. McClure, E.M., Saleem, S., Pasha, O., & Goldenberg, R.L. (2009). Stillbirth in developing countries: A review of causes, risk factors and prevention strategies. *Journal of Maternal, Fetal, and Neonatal Medicine*. 22(3):183-90.
17. McNiff, J. (1993). *Teaching as Learning: an Action Research Approach*. Routledge, London.
18. Misso, M., Ilic, D., Haines, T., Hutchinson, A., East, C.H., & Teede, H. (2016). Development, implementation and evaluation of a clinical research engagement and leadership capacity building program in a large Australian health care service. *BMC Medical Education*, 16(13). doi: 10.1186/s12909-016-0525-4.
19. National Institute for Clinical Excellence (NICE). (2015). *Postnatal care up to 8 weeks after birth*. Clinical Guideline: London: Royal College of Obstetricians and Gynaecologists Press [Online]. Retrieved October 3rd, 2016 from <https://www.nice.org.uk/guidance/cg37/resources/postnatal-care-up-to-8-weeks-after-birth-975391596997>.
20. Poston, R.D. & Buescher, R. (2010). The essential role of the clinical research nurse. *Urologic Nursing*, 30(1), 55-63.
21. Stringer, E.T. (1996). *Action Research: A Handbook for Practitioners*. Thousand Oaks, CA: Sage.
22. Sun, C., & Larson, E. (2015). Clinical nursing and midwifery research in African

- countries: A scoping review. *International Journal of Nursing Studies*, 52, 1011-1016.
23. Thorp, J. (2008). Synthesize evidence and they will change? *American Journal of Obstetrics and Gynecology*, 199(5), 441-442.
  24. Turan, J.M., Bulut, A., Nalbant, H., Ortaylı, N. & Erbaydar, T. (2006). Challenges for the adoption of evidence-based maternity care in Turkey. *Social Science and Medicine*, 62(9), 2196-2204.
  25. Uneke, C.H., Ezeoha, A., Ndukwe, C.H., Oyibo, P., Onwe, F., & Aulakh, B. (2013). Research priority setting for health policy and health systems strengthening in Nigeria: the policymakers' and stakeholders' perspective and involvement. *The Pan African Medical Journal*, 16(10). doi:10.11604/pamj.2013.16.10.2318.
  27. World Health Organization. (2008). National strategy and plan of action for nursing and midwifery development in Iraq 2003–2008. Geneva, World Health Organization.
  28. World Health Organization. (2013) WHO Recommendations on Postnatal Care of the Mother and Newborn [Online]. Retrieved October 3rd, 2016 from [http://apps.who.int/iris/bitstream/10665/97603/1/9789241506649\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/97603/1/9789241506649_eng.pdf).
  29. World Health Organization. (2016a). Retrieved September 3rd, 2016 from <http://www.emro.who.int/countries.html>.
  30. World Health Organization. (2016b). Retrieved September 4th, 2016 from [http://www.who.int/healthinfo/global\\_burden\\_disease/definition\\_regions/en/](http://www.who.int/healthinfo/global_burden_disease/definition_regions/en/).