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Celebration of 16th Anniversary of GNFSL
Annual General Meeting - 2nd March 2019

Content

Editors

Message from the President

Graduate Nurses' Foundation of Sri Lanka

Dr. MKDL Meegoda

With great pleasure I welcome you to the 16th Annual General Meeting of the Graduate Nurses' Foundation of Sri Lanka (GNFSL). I am honoured and privileged to be given this opportunity to send this message to the respective members of this association.

As a Foundation that maintains the professional status of the nursing profession, we have an important role to play for the preparation of nursing professionals to face future challenges. The members of the GNFSL consists of enthusiastic and capable individuals and we are all eager to enhance the reputation of this association by increasing the membership in Sri Lanka.

In 2016 I came with a sense of trepidation to this organization. When I thought deep of this Foundation I thought that the motivational activities should be continued to sustain our vision. Some of the events have been conducted and sustained annually and biennially. Several workshops on research have been conducted throughout the past years having identified the need for conducting research by nursing professionals. Annual quiz competitions and academic sessions are some of the important events which gathered members and nursing undergraduates under one roof. There was a period that when had to plead with some nursing professionals to send in articles to publish in our newsletter. Publishing articles from nursing professionals is a timely need. What we do, what we have found and our future expectations have to be published because as professionals we have a responsibility towards the public. To overcome this need our Foundation made a strategy to receive more scientific writings and to gather all the members, non-members and the undergraduates too. Now general articles are giving way to the scientific ones for entry in our new vision.

In early 2020 we proposed to have our next academic session. This is high time to think how we can get involved with it and have research articles. All the articles will be published in the session proceedings and one selected article will be published in the Journal of Organization of Professional Associations of Sri Lanka. As we promised at the previous academic sessions, I have a sense of success on all this. Please do get ready.

We cannot accomplish the objectives of this association in isolation. We shall seek your input in the coming years on various aspects. For the continued health of this Foundation, your active participation is essential. Please be on the lookout for calls for articles for our newsletters, volunteers for serving on committees and be willing to send in suggestions.

Please contact me or any member of the executive committee with suggestions. I look forward to engaging with all of you in serving our Foundation. I express my sincere thanks for the cooperation and assistance received so far from my executive committee and from the membership.

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Message from the Patron

Relevance of the Study of Psychology to Nursing Care Management (NCM).

Mrs. Trixie Marthenesz

As the Patron of the GNFSL I am glad to observe the progress in the issue of the New Vision especially contentwise and the regularity of its issue. With the dawn of this New Year 2019 my best wishes to you for the continued success and happiness arising thereby.

In the previous issue of the New Vision (Vol 7. Issue 3. November 2018) the term Therapeutic Touch with reference to NCM has offered me some food for thought. Hence the outcome of this message with a view to expressing my thoughts in a very simple manner.

Psychology is a Science that deals with the Behaviour of People of all ages, sick and infirm or fit and well from birth and infancy through childhood, adolescence (early and late) adulthood and senility until his or her demise. This subject of Psychology is categorized under several fields of study such as General, Experimental, Educational, Social, Clinical, Counselling etc. As such its relevance to professionalism is obvious no doubt but with the How and Why of its study relating to NCM being questioned. I am surprised with the ignorance.

I do not intend defining the term Therapy. We are well aware of our Service with Tender Loving Care (TLC). It is not a mere job working with paper and pen or with remote – controlled devices. Our personal service rendering care for the Comfort and Safety of our patients in particular is undoubtedly Therapeutic.

Many are the situations where I have had to explain the How and Why with reference to the Freshers in NCM in our Schools, Colleges, Departments in Universities and even the recently established Faculty of Allied Health Sciences, University of Sri Jayewardenepura. I am certainly quite perturbed by the ignorance of some people on the subject; some of them are professionals.

To answer the How and Why of Psychology for Nurses I have taken five “easy to understand” Reasons.

They are

a) Knowledge and Understanding.
b) Interpersonal Relations.
c) Communication.
d) The Therapeutic Role.
e) Attitudinal Skills.

a) **A Knowledge and Understanding.**

A Better knowledge with Understanding following it pertaining to one's own self is foremost. (Joseph Luft and Harry Lipton, Essentials of Psychiatric Nursing 14th edition C.M. Taylor 1944) is familiar amongst Nurses and I need not explain it here. The Nurses' Knowledge of it while applying to one's own self does certainly apply to another ; especially to another presenting Illness-Behaviours. Thus to gain the confidence of those patients committed to their care is assured with the offer of Help to Help Themselves.

b) Inter Personal Relations.

This aspect of the study of Psychology is assured with the skills mentioned above of gaining knowledge and the follow up by the understanding to apply it with Self-Confidence.

c) Communication.

Effective Communication is either Verbal or Non- Verbal (body language) and the skill to Listen with Patience taking sufficient time is very important to help another seeking the Nurse's help; Help to Help himself or herself or even the relatives, friends and the community as a whole.

d) Therapeutic Role.

The Relevance of the study of Psychology to Nursing Care Management (NCM) is quite clearly stated by the Aims of Nursing as given thus

a) Alleviation of Suffering
b) Prevention of Disease
c) Promotion of Health
d) Restoration to Normalcy failing which to a Peaceful Demise.

e) Attitudinal Skills.

Alongside the Therapeutic factors mentioned above the development of appropriate skills in compliance without which any venture, professional or otherwise could fall apart. Therefore it must be positively or with thorough understanding aligned with the Study of Psychology for the expected success; from the planning stage itself to achieve any success at the end.

May I now conclude my message having clarified it with the World Wide Nurses' Motto.

Light the Lamp of Love and Service

First Death Anniversary of Mrs. Sumana Perera

A Founder Member of the Graduate Nurses' Foundation of Sri Lanka

One year has passed since the death of Mrs. Sumana Perera. However, the memories of strong her leadership still guide us to develop the nursing profession in Sri Lanka. Her inspiring leadership contributed much in uplift the nursing profession in the country. As it was a sudden death, all of us were shocked hear her lost on 27th February 2018. She was one of the senior colleague among few who guided us for professional development.

Mrs. Perera joined the School of Nursing Colombo in Sri Lanka in 1963. On qualifying she was appointed as a Nursing Officer to serve the public. Then she was promoted as a Grade I Nursing Officer (Nursing Sister). As a memorable step in her professional life, she initiated and organized a Medical Intensive Care Unit at the National Hospital of Sri Lanka (NHSL). With her immense experience and qualifications she was promoted as a Special Grade Nursing Officer (SGNO) in the Base Hospital Gampaha and later transferred to the NHSL. As a SGNO in the Accident Service, she offered her leadership to organize a new sophisticated Accident Service and Orthopedic Service under the Finland Project. She took the challenge in further developing the Nursing services following her promotion as the Chief Special Grade Nursing Officer (CSGNO). During this period she qualified for her BSc. Nursing degree with the first batch of BSc. Nursing graduates in Sri Lanka from the Open University of Sri Lanka. This very talented lady was promoted to the Director of Nursing Medical Services in the Ministry of Health in 1993. Her devotion to develop health care in the country has provided immeasurable service to the nation.

Mrs. Sumana Perera was a highly professional visionary leader who guided junior professionals to develop as dynamic professionals. She assumed the positions of President, Secretary and Treasurer of the Sri Lanka Nurses' Association (SLNA), the professional organization of nurses and contributed much to uplift the nursing profession in the country. She always encouraged other nurses to dedicate in inculcating professionalism during her leadership in the SLNA. Her special quality was the dedication to develop the nursing profession in the country without any expectations in return. She always accepted our invitations and actively engaged herself in the activities of the SLNA. Mrs. Perera volunteered to organize and become a resource person in any professional development program in nursing. She was a frontline member of the team which was dedicated to establish the Sri Lanka Nursing Council (SLNC) and university education for nurses in Sri Lanka. The professional development activities that she implemented through the SLNA enhanced the nursing profession in the country to connect with international organizations.

She was a founder member of the Graduate Nurses' Foundation of Sri Lanka (GNFSL) and she worked hard for this Foundation to get the membership in the Organization of Professional Associations OPA of Sri Lanka. She continuously supported the development of GNFSL until her last moment. We still remember her guidance and advice as a visionary leader of the profession.

Mrs. Perera was a role model for nurses and she inspired her peers and juniors. She continued with many other educational programs without giving consideration to her age and her busy home life. Even today she remain as a good example for us nurses. Even though she retired from the government service she never retired from the nursing profession. She travelled throughout the country and was always with us for the professional development programs organized island wide. Simultaneously she has been in membership with public services such as Lions Club and the experience she gained from it she shared with us during our professional discussions.

Dear Madam Sumana Perera, we still feel that you are with us. We cannot think you are no more. You are in our hearts forever. All the nurses pay their respect and heartfelt gratitude for the valuable services that you have rendered to the nursing profession. We the Graduate Nurses' Foundation of Sri Lanka together with all nurses, nursing graduates wish that **"May you attain the Supreme Bliss of Nibbana!"**

W. A. Keerthirathne
Assistant Secretary
Graduate Nurses' Foundation of Sri Lanka

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Nurses' Role in the Process of Breaking Bad News

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Breaking bad news is an emotional subject among health care professionals, It is one element of patient-professional communications and also it is one of the most difficult tasks that healthcare professionals have to undertake. (Riddleston, 2014). Therefore delivering bad news is complex and it requires comprehensive training and skills. (Donnell & Newell, n.d.).

According to Kolehmainen as cited in Buckman (1992), Warnock (2014) bad news causes higher levels of emotional disturbance and reduces the capacity of both patients and families to absorb and retain information. More over bad news can often change the lives of the patients and their families. (Kalber, 2009). In working with patients and their families, the role of the nurse is multifaceted in such instances as care provider, facilitator, supporter, counsellor, educator, teacher and advocator. Thus, nurses have an important role in the process of providing information and helping patients and relatives to prepare for receiving, understanding and coping with the bad news which they have been receiving. (Abbaszadeh et. al., 2014).

"Any news that drastically and negatively alters the patient's view of her or his future" is termed as bad news (Buckman, 1992). Bad news can be a personal perception. It makes it difficult for any individual to anticipate the impact and the consequences of distressing information on the patient and his or her family. (Ptacek & Eberhardt, 1996 as cited in Bumb et. al., 2017). However, bad news delivery is not limited to death notification alone. Bad news is described as any information that conveys adverse changes in one's life expectations. As examples they vary from death of a loved one to a difficult diagnosis or situation that will allow only a few options in his or her future. (Barclay, Blackhall & Tulsky, 2007; Fallowfield & Jenkins, 2004; Farrell, Ryan, & Langrick, 2001 as cited in Myers, 2010).

According to the Royal College of Nursing, there are situations which would be universally recognized as delivering bad news; the adverse results of pre-natal or genetic tests, diagnosis of a serious illness or condition, the progression of an illness when cure is no longer possible, serious road traffic accident and injury, suicide or sudden death.

Breaking bad news to individuals who are seriously ill and having a poor prognosis is a complex and contentious issue (Hospice Friendly Hospitals, 2013). Historically, Doctors have been the primary deliverers of bad news to patients. But literature shows that they are often poorly trained and emotionally ill equipped for this complex task (Buckman, 2005 as cited in Kalber, 2009). In some countries only doctors have the right for breaking bad news and in some countries both doctors and nurses have the right to break bad news (Warnock, 2014, Kalber, 2009). However in some countries nurses are not having the right to break bad news, Medical personals break the bad news to the patient, and the nurse anticipates the need for ongoing support and information. (Bumb et. al., 2017).

Usually after the provider initially relays information about the patient's diagnosis or disease progression, Nurses are the members of the healthcare team who provide ongoing support to the patient and family members (Bumb et. al., 2017). Within this framework, nurses play a diverse range of roles that include providing information and helping patients to prepare for, receiving, understanding and coping with the bad news. According to Aungst, (2009) as cited in Bumb et. al. (2017), patients and families often turn to the nurse for clarification and additional information or to redeliver the bad news. According to perceptions of Nurses, being involved in the process of breaking bad news strengthens their relationships with

patients and relatives and therefore it enhances the nurse-patient relationship. (Warnock et. al. 2010). Clinical communication makes a great impact on patient satisfaction and their health outcomes. (Martis, 2012). It is often considered as the "foundation of therapeutic relationship" (Levetown, 2008, as cited in Martis, 2012). The trusting relationship between the nurse and the patient is extremely important for effective communication. (Mishelmovich, Arber, & Odelius, 2016 as cited in Bumb et. al., 2017).

According to Myers (2010) after disclosing bad news the receiver may face many detrimental effects and in addition to that uncontrollable, inescapable traumatic experiences result in increased biological reaction to the stressor. Further, the manner in which bad news is broken can have a great effect on both the recipient and the giver. If we do it poorly it may affect all the patients and their relatives' future contact with the health care professionals. It will get involved in their treatment. Further, it may impair their quality of life and well-being too. (Riddleston, 2014). When the patients are not emotionally prepared, they would have a negative effect on the course of treatment. Although nurses play an important part in communication between physicians, patients and their companions, their role in breaking bad news has been less emphasized. According to Kolehmainen as cited in Rassin et al. (2006) research indicates that nurses have a crucial role in the process of breaking bad news and in supplying written information for the receiver of the news. In traditional health care practice breaking bad news was expected be the responsibility of the Doctor, and most often the patient's consultant was the primary bearer of bad news to their patient or family. In the Sri Lankan context the situation is similar. The capacity to communicate bad news effectively is not an inborn trait but requires deliberate efforts and suitable resources (Martis, 2012).

According to the latest study findings, the quality of information provided to patients and their families depends on the education and training of the healthcare professionals who deliver the bad news (Mishelmovich et al., 2016 as cited in Bumb et. al., 2017), Current the landscape of health care is changing and as a result the nursing role is getting central in providing support to patients and families during the process of breaking bad news (Royal College of Nursing, 2015). However, the nurse-patient relationship also has changed considerably. Not only the patients but also patients' companions and relatives are often involved in treatment planning and decision making.

People's beliefs and behaviours related to bad news vary according to the dynamic nature of their culture. Mostly the concept of 'breaking bad news' is limited only to convey the message or the content as medical information but clients are expecting beyond that as sharing experiences of patients, assisting their emotional needs, life issues and supports. (Abbaszadeh, 2014, Martis & Westhues, 2013). Across all cultures, patients generally prefer an experienced provider who is empathetic and caring, offers hope, and uses the correct wording for difficult conversations to communicate bad news. (Martins & Carvalho, 2013, Aminiahidashti et al., 2016 as cited in Bumb et. al., 2017). Every patient does not react the same way. Culturally specific generalizations, nurses or clinicians should ask each individual his or her preferences very carefully, on a full disclosure of information prior to breaking bad news (Rao et al., 2016 as cited in Bumb et. al., 2017).

Concerning ethical principles which are associated with decisions on disclosing or withholding bad news from patients such as autonomy, beneficence and non-malefficience, health professionals should recognize and support the unique values, priorities and preferences of patients, because patients are culturally varied. In modern medical ethics, one of the most important rights of patients is their will. Accordingly, they can make decisions about their disease and the diagnostic and therapeutic procedures. (Abbaszadeh, et al., 2014). There are some situations in which those health professionals withhold information. That if they think the information given to the patient would cause serious harm to the patient, which is termed paternalism. A desire to protect the

patient from the truth and the extent of his or her illness is another reason. Thus all disclosure are not offered to the patient first to avoid difficult conversations, but with family members, before any communication is shared with the patient (Al-Mohaimeed & Sharaf, 2013; VandeKieft, 2001as cited in Bumb et. al., 2017). At certain occasions patients refuse to talk about their illness due to their autonomy. In those situations, there may be implications for the requirement of informed consent, diagnosis and prognosis and it is a profoundly disturbed consent process (Hospice Friendly Hospitals, 2013).

Further, a patient's capacity to accept and integrate bad news depends not only on the personal individual differences of the person or family unit but also the communicative competence of the health care professionals. (Martis & Westhues, 2013). Breaking bad news discussions may have to occur frequently in an effort to help patients and family members understand the aspects of care and breaking bad news. It is generally not a onetime event and nurses must work with families to process the difficult information and provide clarification as needed. (Warnock, 2014). Many researchers have shown that most of the health professionals feel unprepared to deliver bad news effectively and there is poor knowledge and usage of guidelines which are available around the world. There is very little education concerning breaking bad news provided for nurses. In addition to that, the level of support from colleagues when breaking bad news is also low. Further, many researchers have explored that health professionals should be trained for communication skills should design research projects and training programs related to various aspects of breaking bad news. (Abbaszadeh et. el., 2014, Adebayo et. al., 2013, Martis & Westhues, 2013, Schildmann, Cushing et. al., 2005, Kolehmainen, 2016, Martis, 2012, Dwamena, Han & Smith, 2008).

When we look at the world situation for to Breaking Bad News, there are models/methods which are applied to this process. According to Kolehmainen, (2016) there are several accepted methods for breaking bad news globally. SPIKES-protocol created by Baile et al. (2000) and the BREAKS protocol by Narayanan et al. (2010) the PEWTER model of Keefe-Cooperman & Brady-Amoon (2013) are the three most popular; most accepted methods. In the process of delivering a bad news, if there is a model it would plan for determining the patient's values, wishes for participation in decision-making, and a strategy for addressing their distress when the bad news is disclosed. It can be increased health professionals confidence in the task of disclosing unfavorable medical information, encourage patients to participate in difficult treatment decisions, and also the health professionals comfort in breaking bad news. Flexible approaches are more likely to address the inevitable differences among patients than a rigid recipe that is applied to everyone. These models reduce he stress of breaking bad news for the physician or health personal, and also improve the interview and the support as experienced by the patient. (Bailea, 2000). Kalber, (2009), it is noted that the presence of a competent, experienced nurse at breaking bad news or interviews could be valuable in order to facilitate answering the patient’s questions to provide support and direction when dealing with the practical and psychosocial concerns that the patient may have.

On the whole, the ultimate goal of nursing is enhancing the patient’s health. Hence the nurse must be aware of and take responsibility for her actions. Further, the nurse must be able to assess how much information can be absorbed by the patient and accordingly she should select the best manner to communicate with each patient. According to the Act on the status and rights of patients (1992), when treating patients, the mother tongue, individual needs and culture of the patient have to be considered as far as is possible in their care and other treatments. Importantly when giving such information, nurses should not act against the will of the patient. This is because if there is a dilemma on given information, it would cause serious hazards not only to the health of the patient but also to entire life of the patient. Particularly for patients, it is a crucial time when they are first

receiving bad news. Therefore, healthcare professionals need to be both competent and confident in breaking bad news to patients and their families

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Clinical Mentoring: Is it Important for Nursing Education in Sri Lanka?

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What is clinical mentoring?

Mentoring is one-to-one, long-term relationship which focuses on guiding, fostering learning, personal & professional growth of the mentee (Chandrasekher, 2014; Andrews & Wallis, 1999; Canadian Nurses' Association, 2004). Clinical mentorship is either a formal or informal way of role modelling to support the learning of professional growth of student nurses and to promote the overall quality of the practice environment. Effective clinical mentorship may provide guidance to student nurses in various practice settings and focus on learning, career development and personal and professional growth through a long term support (Canadian Nurses' Association, 2004). Good clinical mentoring depends upon well-planned learning opportunities and the provision of consultation of student nurses (Bellman et al., 2014). Nursing and Midwifery Council (NMC) in UK stipulates clinical mentoring as a mandatory requirement for pre-registration nursing and midwifery students (NMC, 2018). According to the latest reports (NHS, 2015), Mentoring is considered the least understood (and the most flexible) feature of the nursing education programmes in England.

Who is a clinical mentor?

A clinical mentor both facilitates and assesses the learning of every student, enabling them to achieve required learning outcomes and competencies and support the student's longer term professional development. A Clinical mentor is usually a registered nurse who has followed an accredited preparation programme by a regulatory body or a higher educational institute. Nursing Midwifery Council requirements for a clinical mentor in the UK include providing support and guidance to students in the practice area, role model the professional values and behaviours and professional integrity (RCN, 2017). In order to be an effective mentor, nurses in particular require training, time to learn, reflect and update their knowledge and practice. It is also a responsibility of every nurse to support students and fellow nursing colleagues who are learning to help them develop their professional competence and confidence. (RCN, 2017).

The importance of clinical mentoring in nursing education?

Clinical placements are one of the essential aspects of nursing education worldwide for the students to apply theory of knowledge to practice to learn key skills and to achieve the required competencies for registration as a qualified nurses (Bellman et al., 2014). Clinical learning environment is a complex social entity and clinical mentoring is an essential component in it. Learning in the clinical setting enables the students to overcome many challenges and provide ability to confront the issues related to patient care. A lifelong learning is promoted and enhanced during this training process. An important aspect of this educational experience is the contribution of the qualified nursing staff in clinical mentoring and student supervision during the clinical placement. Bellman et al., (2014) wrote "the first year nursing students are likely to want their clinical mentor to act as a guide and assessor" but, by the third year the students will be aware of the nurses who demonstrate good examples and become their role models even without direct supervision.

Do clinical mentors need training?

Canadian Nurses' Association stresses that having programs to support teaching and

learning through role modelling is a key aspect in advancing the quality of nursing (CNA, 2001). Most of the developed countries practices high quality mentoring systems in nursing education that enhance undergraduate clinical training through mentoring where they provide one to one basis nurse – student relationship over a long period of time(Canadian Nurses' Association, 2004). There is evidence that such programmes improve the quality of practice environments, assist novice nurses with socialization and support in their direct practice, allow the qualified nurses to further develop their competencies in patient care, administration, education and research, to develop common understanding of the concepts of mentoring (Canadian Nurses' Association, 2004).

The Code of Ethics for registered nurses in Canada states that the nurses should share knowledge with other members of the healthcare team, provide mentorship and guidance to the students for the professional development (Canadian Nurses' Association, 2002, p. 16). Further the individual nurses are responsible for acquiring the skills and knowledge required to become clinical supervisors by participating in mentor training programmes. The Code of Ethics stresses "where programmes do not exist, nurses may need to advocate for the resources necessary to develop and implement such programmes" (Canadian Nurses' Association, 2002).

To improve the quality of mentorship the international project named "Empowering the Professionalization of Nurses through Mentorship (EmpNURS)" has been launched within the European Union and mentorship programmes have been implemented aiming to improve the quality of nurse education through proper supervision of student nurses during their clinical practice (Tichelaar et al., 2013).

Clinical mentoring in Sri Lanka

Clinical mentoring is well established in most of western countries but in Sri Lanka nurses currently do not engage in a systematic mentoring process. In Sri Lankan context the reality is many student nurses do not have adequate clinical mentors who are trained, supportive and motivated to teach during their clinical placements. Instead the ward sisters and senior nurses on duty will take the responsibility to guide the students during their clinical placements. It is a common complaint from the student nurses that many of the staff nurses are not motivated to guide them during clinical practice and there are situations that the students are getting bullied by the senior staff during their clinical training. A study shows that support, guidance, care and supervision are essential components that Sri Lankan student nurses expect from the staff nurses and nursing tutors. (Silva et al. 2017).

Unfortunately in Sri Lanka at present there is no well-established mentoring programme that provide professional training and qualification to become a clinical mentor. Since many state universities conduct degree programmes in nursing currently, it is an essential requirement to initiate a clinical mentoring programme and to establish a registry of clinical mentors for student nurses in Sri Lanka. Higher education institutions are responsible for providing resources and offer mentor training programmes for the nurses to ensure that the nursing undergraduates have adequate qualified clinical mentors during their clinical placements.

Quality and the effectiveness of clinical training of student nurses is affected and there are also situations that students are bullied at clinical placements as a result of lack of the clinical mentoring practice. Therefore, clinical mentoring is a major area to be discussed and need development in Sri Lanka.

In year 2014 the Department of Nursing, Faculty of Allied Health Sciences, KDU conducted a one-day workshop for the nursing staff in teaching hospitals where KDU nursing undergraduates obtained their clinical training. The objective of the workshop was to give an overview to clinical mentorship. We observed an increased motivation and support for clinical mentorship among the nursing staff who participated in the workshop during clinical placements of our

nursing undergraduates. In addition, it is a national requirement to establish a training programme for clinical mentorship (A clinical Mentor Training Programme) for the registered nurses who work in the teaching hospitals where nursing students obtain their clinical training.

Future plans

With so many challenges and opportunities for students within health care today, it is important to start planning for a sustainable programme in clinical mentorship in Sri Lanka to improve the quality of nursing education. Accordingly a project has been planned to develop a clinical mentorship training programme to enhance the effectiveness of nurse education in Sri Lanka in collaboration with the Ministry of Health, Institute for Research and Development, Sri Lanka, Keele University, UK and University of Central Lancashire, UK. We hope we can establish a well-planned programme of clinical mentorship where a trained nurse may support a group of student nurses who obtain training in his/ her ward for a short time in Sri Lanka in the coming years.

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Special Notes

The GNFSL is accepting articles from 15th March 2019 to publish in an upcoming News Letter which will be published at the First General Meeting, 2019.

Please be ready with your research papers to present and publish in conference proceedings (January 2020) print with an ISSN number. We will inform you soon after the paper acceptance opened (During March - April 2019).

Application of Evidence Based Practice to the Nursing Profession

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What is Evidence Based Practice?

Evidence-based care is usually referred to as Evidence-Based Nursing (EBN) or Evidence-Based Practice (EBP). This means, to care for or to nurse with a strong foundation on evidence-based findings. Evidence-based practice is about good practice and improving the quality of care (Barker, 2013). The term evidence-based nursing practice (EBP) has been interchangeably used with research utilization, which is a part of EBP. It simply means that nursing practices are based on proven evidence, either through studies or expert findings.

Most of the nurses believe that EBP is only based on research utilization. No. It also utilizes the knowledge from various sources such as Quality improvement projects and recommendations from the experts in particular fields. EBP requires that knowledge be transformed by the systematic study of how evidence from research can be best applied in practice. (Alfaro-Lefevre, 2013). However, all nursing knowledge cannot be used in EBP. In fact, EBP exists only when the practice has been screened by an expert committee. The expert committee usually comprises nurses (academics and clinicians) with specialization in a particular field as well as nursing administrators.

Importance of evidence based practice

There is nothing more important to patients and professional nursing than evidence based clinical interventions that can be linked to clinical outcomes and used as a basis for care within the institution. (Heidenthal, 2003). Evidence-based practice demands changes in education of nurses, more practice-relevant research and closer working relationships between clinicians and researchers. EBP also provides opportunities for nursing care to be more individualized, more effective, streamlined and dynamic and to maximize effects of clinical judgment. When evidence is used to define the best practices rather than to support existing practices, nursing care keeps pace with the latest technological advances and takes advantage of new knowledge developments. (Youngblut & Brooten, 2001).

EBP has been shown to increase patient safety, improve clinical outcomes, reduced healthcare costs and decrease variation in patient outcomes. (Fineout-Overholt, Melnyk, & Schultz, 2005). However, there has been a lack of generally agreed- upon standards or processes that are based on the evidence addressing the late development in EBP (Heidenthal, 2003).

Process of Evidence Based Care

Some nursing and medicine policy makers recognize evidence based care as care based on state of the art and science reports. Literature reviews continue to reveal the difficulties and barriers that nurses face in providing evidence-based care. Various models have been recommended to ensure that nurses are able to provide EBP. However, it is a process approach to collecting, reviewing, interpreting, critiquing, evaluating research and other relevant literature for direct application to patient care.

An example of an EBP model is Olade's The Strategic Collaborative Model for EBP (2004) which has been combined with both Lewin's three basic phases of change and Havelock's steps of planned change. The main aim of this model is for the nursing educator or researcher and nursing administrator to cooperate and collaborate in facilitating EBP in nursing. There are three phases including six steps in the model;

Phase One – Unfreezing

Step 1: Building relationships

This involves the building of collaborative relationships between key nursing leaders in education and healthcare institutions.

Step 2: Diagnosing the problem

In this step the Advisory Council brainstorms to determine the areas of care that are most in need to be improved within the healthcare system.

Step 3: Acquiring resources

It is the acquiring of the needed human and financial resources to facilitate the shift to EBP.

Phase Two - Moving

In this phase group of practising nurses redefine the situation under the mentorship of a nursing research consultant.

Step 4: Choosing the solution

Evidence-based reports are critically reviewed in this step.

Step 5: Gaining acceptance

Ii is the implementation of the chosen evidence on a pilot basis as recommended by the nursing research consultant.

Phase Three - Refreezing

Refreezing ensures the desired change becoming an inherent part of the normal way of doing things in an organization.

Step 6: Stabilization

It is the sustenance of the implemented scientific evidence in nursing care delivery that makes EBP the norm in nursing.

The EBP process involves the integrating of both clinically observed evidence and research directed evidence. It then leads to a state of art integration of available knowledge and evidence in a particular area of clinical concern that can be evaluated and measured through the outcome of care. Applying the best available evidence does not guarantee good decisions but it is one of the keys to improving outcomes affecting health. EBP should be viewed as the highest standard of care so long as critical thinking and sound clinical judgement support it.

Nurses should always need to search for the best evidence available to support their clinical decisions; sometimes a little research backing for clinical actions. In that case nurses should use their critical thinking skills and apply the consensus of experts. Health care institutions have an individual responsibility to provide a supportive environment to EBC.

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Role of Nursing Professionals in Precision Medicine

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Medication is known to be a necessity indeed for most of the disease conditions which enhances the recovery of patients from most of their illnesses. However, it is also evident that a substantial number of people throughout the world is also under medication every day which is not effective on them. For an example, most frequently used drugs in the United States of America are only effective between 1 in 25 to 1 in 4 people who take them. Getting worse, some others, for an instance 'Statins" used to treat high levels of cholesterol in blood are found to be in effective on 1 in 50 patients. On the other hand these drugs are known to have harmful side effects on different people who use them; basically on selective ethnic groups. Thus, it is now recommended to consider the personal variability in prescribing drugs for a disease, driving medication to a more precise format.

Persons' response to a particular drug is determined by various factors including, environment, and genetics. Among those the genetic factor matters mostly. Presence or absence of particular genes which code for specific enzymes to metabolize the respective drug in the patient is a critical factor in deciding the response of the patient to the drug. Moving forwards the study area known as 'Genomics' came to play a significant role in precision medicine which is dedicated to the study on the whole genome of an individual with its functionality. As we know, DNA sequence of any two individuals is 99.9% similar. However, the remaining 0.1% variation can alter the control of genes, action of their products (proteins), mediate a responses to different drugs and modulate person's susceptibility to certain disease conditions. In this regard, Genomics is being used to propel the traditional health care to a more precise and improved stage via different strategies. Genomic information can identify the individuals who are under risk of having genetic disorders. It can also help with the identification and development of new treatments or therapies to reduce the burden of diseases. On the other hand, many disease conditions express the same clinical signs and symptoms which may be caused by different genetic variants. These anomalies can be more precisely diagnosed using genomic interventions. After identification of the variants, targeted and personalized treatments can be selected and can predict each individual's reaction to the medication. In addition, genomics on pathogens provide opportunities on tracking the epidemics by identifying the specific pathogens and the origin of the outbreak.

Healthcare providers are key players in the implementation of precision or personalized healthcare, where nurses can play a significant role. They can be involved in this task basically at two different stages; patient assessment, management along with improving and dissemination of the knowledge on clinical genetics. Patents can be assessed and managed in four different phases, namely pre-diagnostic phase, diagnostic phase, treatment or prognostic phase, ongoing monitoring and management phase.

In the pre-diagnosis phase patients are assessed for clinical risk factors, family history and environment risk factors. Moreover, nurses can explain the importance, implications, validity and familial implications of genetic risk testing. At the diagnostic stage, nurses may discuss the genetic testing for relevant mutations associated with clinical presentation with the patients. At the treatment or prognostic phase, nurses have space to identify patients for whom any genomic or genetic testing platforms are appropriate for guidance in treatment considerations or prognostication. Moreover, they also can discuss recommended therapies based on genetic disorder or cancer and mutation identification. In addition, they can use clinical decision support tools to integrate personalized approaches and patient data such as biomarkers

and patient reported data or clinical data into patient treatment plan discussions. At the phase of monitoring and management, patients can be supported in determining and guiding on family implications for genetic test results and psychosocial support for patients throughout the chronic phase of illnesses.

Under the improvement and dissemination of the knowledge on clinical genetics, understanding of and ability to explain genetic and genomic tests, their validity and the meaning of results that will be obtained, navigation of the ethical, legal, social issues involved in genetic and genomic testing nurses also can contribute to increase the awareness of referral base for genetic counseling, clinical trials or specialty care.

In conclusion, nursing professionals can play an indispensible role in precision medicine, especially devoting time for a patient-centered care while gaining advanced knowledge on genomics and its plausible implications in health care management.

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Incivility, Is it an Issue for Health care Workers?

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Incivility in the health care sector is often referred as violence or harassment among healthcare workers and clients. The past 20 years have seen significant changes in the nurses and other health care workers' work environment, including increasing stress as well as increase in instances of violent situations due to stressful conditions. Such disrespectful behaviour can no longer be tolerated because of the impact it has on the patients' safety and health care workers retention. Furthermore uncivil behaviours of health care workers can lead to medical errors and preventable adverse patient outcomes. Much research that has focused on issues and workplace incivility has been recognized as a persistent and growing problem. (Anderson & Pearson, 1999). Therefore discussion regarding incivility is an existing need.

What is incivility?

Incivility can be defined as deficiency in civility or good manners. The word incivility has been derived from the Latin language and it means not of a citizen. (Wikipedia, 2018).Most of the time human conflicts occur due to miscommunication.

Examples of uncivil behaviours include , undermining a colleague's credibility, treating another like a child, berating one for an action in which he or she has played no part, giving people the silent treatment, publicly reprimanding someone, making unfounded accusations and spreading gossip . Being uncivil also includes excluding someone from a meeting, neglecting to greet someone, cutting people off while they are speaking, not turning mobile phones off during meetings, listening to another's phone call, ignoring a colleague's request, using demeaning language or voice tone, making inflammatory remarks, or and writing rude or unnecessary incendiary emails, among many others (Trudel & Thomas, n.d).

Reasons for incivility

Incivility can occur due to violation of work place norms and respect, ambiguous intent and low intensity. Building and developing technical, interpersonal, and intercultural competencies are needs of a highly skilled workforce in the health sector. These constant changes place a great deal of stress on both the management and workers, thus increasing the potential for workplace conflict and deviant workplace behaviour including incivility.

Outcomes of the incivility

Incivility is a pervasive problem in health care today.There is a relationship between workplace incivility and work place violence and the negative health consequences for employees. Although research lacks supporting the relationship between workplace incivility and productivity, researchers have explored the financial cost of workplace violence, estimated to be $400 million a year (Liberty Mutual, 2004). So early interventions are needed to reduce the costs of work place violence to organizations.

Incivility affects employees and their organizational well-being. Co-workers' incivility affect higher levels of employee burnout, feelings of strain and decreased performance. Further it has related to employee withdrawal, decreased satisfaction and decreased performance (as cited Sliter , n.d.). It affects on employee health, attendance, job satisfaction, productivity, commitment, turn over, legal action and heavy financial burden to the government. In the health sector, disrespectful behaviours impact especially on patient safety, health care workers retention, medical errors and adverse patient outcomes.

The solutions to overcome the issues of incivility

There are some recommendations that might be effective in building a respectful work environment to decrease incivility in any work place. The most important thing is building and maintaining a respectful environment. The manager should be a role model for the civil behaviour and should help to create a culture of civility and respect. Not only that, managers need to think why incivility behaviour occurs and are there reasons in the healthcare environment that triggers incivility? If there is uncivil behaviours a training can be given a didactic session explaining incivility and the behaviours. This training can include how to deal with confrontations and conflicts, responses to uncivil and expected civil behaviour are in the work place. Presentation of the organization's policies on conducting civil behaviour can also be beneficial. From these presentations nurses can understand what the behaviours are that organizations expect and how to report uncivil behaviours. The training sessions can be included with specific examples of common forms of uncivil behaviour and provision of assertive responses that the victims can feel comfortable with using without undermining working relationships with the perpetrators.

Managers should create a reporting system for uncivil cases and closely monitor those incidents (Disciplinary Team).Nurses should have the opportunity to report disruptive behaviours without fear or criticism from co-workers or supervisors. The reporting system should address these cases as close to the time of occurrence as possible. To support a healthy work environment the staff and management can jointly develop a code of conduct to set expectations and hold the staff accountable for their actions and behaviours.

As discussed above incivility can be described as the deficiency in civility .The main reasons for the incivility are the employees being treated with disrespect. Rude behaviours, being ignored, lack of politeness and sarcasm are all instances of incivility. When considering the outcomes of incivility they can affect the individual as well as the organization. In the health sector it gives a poor outcome of patients as well. The main solutions to overcome the issue of incivility are understanding why incivility occurs, maintaining respectful environment for the employees in the health care sector, and conducting training sessions on incivility for all the staff members in health sector .

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Urological Nursing: Important Points to Apply in Procedures to Improve the Urinary Health Care of Patients

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A Urology Nurse is compassionate when dealing with urological interventions and personal issues of his/her patients. The nurse should have excellent knowledge and practice to provide extensive care of urological nursing. They should reflect a sound knowledge and skills on urological nursing. These nurses have to deal with patients, with different types of urinary catheters in there day to day activities. According to the European Association of Urology Nurses (EAUN) (2012), most common system for Healthcare-Associated Infections (HAI) is genitor-urinary system. Nearly 40% of hospital-acquired infections are urinary tract infections. Prolong urinary catheterization and drainage systems are the common causes of infections. This document is supported by the clinical practice of a patient with a urinary catheter. But this should be used in conjunction with local protocols.

Types of urinary catheters

Appropriate selection of catheters minimizes the complications. The assessment is designed by the manner in which catheterization is needed. The diameter and length according to the nature of the drainage must be considered. Among different types of catheters, the one-way catheter has only one way to drainage. This catheter is intended to remain in the bladder for a small period of time and is mainly used for Clean Intermittent Self Catheterization (CISC) as well as urodynamics. In two-way catheters, one channel is used for drainage of the urine and other channel meant for the balloon but in three-way catheters the third channel is used for irrigations.

Foley's Color Code

COLOR	SIZE FRENCH	SIZE MILLIMETER
orange	6	2.0
red	8	2.7
yellow	10	3.3
white	12	4.0
green	14	4.7
orange	16	5.3
red	18	6.0
yellow	20	6.7
purple	22	7.3
blue	24	8.0
black	26	8.7

Foley's colour code
Source: Nursing Skills Guide http://nursingskills-guide.blogspot.com/2010/03/foleys-catherter.html

Selection of catheter tip

The "whistle tip" design is used to drain a large volume. Therefore, it facilitates the drainage of debris and clots. Catheters "Robert tip" where it has eyes below as well as above indicate the measure of the residual volume of urine. The curved tip is the "Tieman" tip catheter used to membranous or prostatic urethra. The Tiemann catheter should be inserted with the tip pointed upwards. Catheter with an open end without eyes is referred as "council" tip. These cathetres can be used for CISC (Shah, 2012).

Selection of catheter material

Plastic PVC catheters are uncomfortable and used only for a short term. Teflon or Polytetrafluoroethylene (PTFE) are coated on a latex. Therefore these can be used up to 28 days. Pure silicon catheters can be used up to 12 weeks (Baynon, 2005).

Selection of catheter diameter, size and length

Catheter diameter is measured as charriere (Ch. or CH) or French gauge (F, Fr, FG). FG indicating external diameters 1mm=3ch. Length cm 6 to 30. It is important to know the inner lumen size of the catheter changes much between in different materials though they are in the same FG. Male length of the catheter is in between 41 – 45 cm whereas the female catheters are 25cm.

Recommendations

Unless otherwise indicated clinically, using the smallest bore catheters minimize the urethral trauma which causes urethral strictures. Female length catheters should not be used for males to avoid urethral damage. But in male catheters can be used for bed bound clinically obese females with fat thighs.

The balloon of the catheter must be inflated according to the manufacturer's recommendation (pediatric - 5ml, adults -10 ml). Usually, for postoperative patients 30ml is used. Sterile water should be used for balloon inflation. Non-sterile water contaminated with organisms may diffuse into the bladder. Air inflation can cause balloon floating in the bladder and poor drainage. Normal Saline may crystallize in the balloon valve and cause problems in deflation.

Contamination

Nurses should have a vital knowledge of contamination. Extraluminal contamination occurs during the catheterization and intraluminal contamination is mainly due to reflux. It allows the pathogens to bypass the host defense. Prolonged urinary catheterization and drainage systems are the common causes of infections. The appropriate selection of the closed urinary drainage system prevents the reflux. Use of Ag-coated silicone catheters cause significantly reduced the incidences of HAI. Observe for drainage tube occlusion, initiate usage of small lumen catheters and hand washing are some basic strategies of HAIs. Further, it is important to avoid unnecessary catheterization as far as possible.

Catheter blockage

Most of the catheters get blocked either by debris or encrustations. Blockage can also occur kinking of the tubes, constipation and catheter against bladder wall. Encrustation occurs due to some organism which produce urease. This urease hydrolyze to produce ammonia and carbon dioxide. This changes the urine Ph to alkaline and formation of magnesium ammonium phosphate and calcium phosphate. Debris is mostly from urothelial cells bladder wall. Therefore, potassium citrate, vitamin C, fluid intake and lemon juice supplements are more beneficial.

Catheter Size (FG)	Indication
6-10	For pediatric use
10	Clear urine, no debris, no grit (encrustation)
12-14	Clear urine, no debris, no grit, no hematuria
16	Slightly cloudy urine, light hematuria with or without small clots, none or mild grit, none or mild debris.
18	Moderate to heavy grit, moderate to heavy debris.
20-24	Heavy hematuria and irrigation or flushing. Need flushing

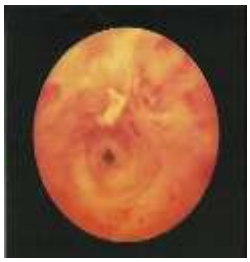
Source: Geng, 2016

Syphoning pressure results in severe catheter reaction in the bladder causing polypoidal inflammation (Chaurette, 2016).This severe inflammation may block the catheter holes resulting catheter blockage. Therefore, elevation of the catheter bag to eliminate the pressure in the bladder reduces the catheter blockage. But it is important not to elevate the bed level. Catheter bypassing is a complication within a 40% of patients with the indwelling catheter. These complications commonly occur on the catheter blockage, constipation and bladder spasms (EAUN, 2012).

Possible complications in patients with the catheter are urethral trauma such as false passage due to urethral perforation, hematuria, stricture formation, bladder spasms, increased risk of bladder carcinoma and calculi.

Catheter care

Urinary tract infections account for 20-40% of HAI an estimated 80% are associated with the urinary catheter (Nicolle, 2014). Personal hygiene, as well as meatal hygiene, is more important in patients




Urethral perforation False passage
Source: Tinhunu, 2017.
https://www.baun.co.uk/files/4513/7407/3969/12.15_-_Juliana_Tinhunu.pdf

with a catheter. Soap and water are sufficient to reach the effective cleaning. Need to manage the catheter and collecting tubes free from kinking to maintain the unobstructed urine flow. Empty the bags regularly to a separate container for each and every patient. On emptying, avoid splashing and contact of drainage spigot with a non-sterile container. There may be a possibility of the necrosis at the penile, urethral and scrotal junction on a long-term use of the catheter. Therefore, stabilizing the urethral catheter, males secure the urinary catheter to the abdomen and females secure the catheter to the leg.

Take-home message

Urinary catheterization should be done only to benefit and outweigh the risk. Therefore, we can consider the alternative to indwelling urinary catheterization. Proper selection of catheters and applying the aseptic techniques is very important. After insertion appropriate fixation of the catheter is of utmost clinical importance. These catheters should be removed as soon as clinically possible.

In conclusion, it is important to know that Urology nurses care for patients across the life span. Therefore, it is essential that urology nurses in the Sri Lankan health care team, provide guidance and care for urinary health.

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Ulcer Healing: Important Facts to Remember

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Normal cutaneous wound healing is a highly integrated, complex network of biological processes consisting of several phases including of haemostasis, inflammation, proliferation (matrix deposition) and remodeling. All these processes should happen in the proper chronological order and time to ascertain optimal healing (Mathieu, Linke et al. 2006). As care givers and key players in the wound care team, nurses should possess adequate knowledge on ulcer healing and specific functions of some cells. Further, enhancing their knowledge on the relationship between blood sugar level and ulcer healing is also important when managing the patients with diabetic foot ulcers. Thus, this article provides you with a basic understanding about the

- Basic steps of normal ulcer healing
- Relationship between angiogenesis and wound healing
- Inflammation and role of the macrophages
- Relationship between HbA_{1c} and circulating endothelial cells (CECs)
- Blood sugar control/ HbA_{1C} and wound healing

Basic steps of normal ulcer healing

Table 1 shows several sequential functions occurring in each of the normal ulcer healing phases. After an injury, blood components are released into the site of the wound quickly and activate the clotting cascade forming a clot. It induces haemostasis and furnishes a matrix for the inflammatory cells to take place inflammation which is characterized by migration of leucocytes to the site of the injury (Veves, Giurini et al. 2012). Among leucocytes, neutrophils are the first cells arrive to the site of the wound to eliminate contaminated bacteria. Next, monocytes which could differentiate from the macrophages are reached to the wound site. It was thought to be that macrophages have a vital function in increasing inflammatory responses and tissue debridement. Simultaneously, many other cells also are migrated to wound site to support in the inflammatory process including keratinocytes, endothelial cells and circulating and local progenitor cells (Veves, Giurini et al. 2012).

Angiogenesis and wound healing

Angiogenesis is a vital event to heal a wound (Brem, Ehrlich et al. 1997). It is based on interplay of several things such as cells, soluble factors, and extra vascular matrix (EMC) components. As a result of angiogenesis, a network of blood vessels are formed in the wound and it allows reaching the macrophages and other important critical cells. These are believed to be synthesized angiogenic growth factors to infiltrate the wound and accelerate healing. Among the reported more than 30 regulatory mechanisms of angiogenesis, growth factors and their receptors, matrix

Table 1 Normal wound healing process

Phase	Important events in the phase
Haemostasis	• vascular construction • platelet aggregation and degranulation • fibrin formation (thrombus)
Inflammatory phase	• vascular exudation • neutrophil infiltration • monocyte conversion to macrophage • matrix enrichment in proteoglycans
Proliferative phase	• angiogenesis • fibroblast infiltration and proliferation • collagen formation
Remodeling phase	• vascular infiltration • fibroblast conversion to fibrocyte • collagen degradation and formation

Source: Mathieu, D., Linke, J. C., & Wattel, F. (2006).

metalloproteinases (MMPs) and chemotactic agents are a few. As a result of mitogenic effects of some growth factors endothelial cells are stimulated to migrate into the wound and form new capillaries (Brem, Tomic-Canic et al. 2003). Impairment of macrophages is a significant indicator of slowing angiogenesis.

Inflammation and role of the macrophages

Specific functions of macrophages include promotion of inflammation by producing a large number of mediators and cytokines in the early wound stage. Expression of anti-inflammatory mediators and production of growth factors such as vascular endothelial growth factor (VEGF), and insulin like growth factor are (IGF)-1 (Brancato and Albina 2011) needed to transform from inflammation to proliferation phase in the wound healing. Another critical function of macrophages is removing neutrophils. Though neutrophils are vital in decontamination of the wound, evidence shows its negative effects in tissue repair, probably due to its ability in destroying normal tissue (Dovi, He et al. 2003). Free oxygen radical produced by neutrophils also negatively affect the wound by damaging tissues. Phagocytes function of macrophages is very poor in diabetes and it causes to weak removal of inflammatory cells such as neutrophils resulting in impairment of wound healing.

Macrophages are also produced VEGF. It stimulates wound healing by several mechanisms such as angiogenesis, epithelialization. (Bao, Kodra et al. 2009; Johnson and Wilgus 2014) and collagen deposition. (Bao et al., 2009). VEGF produces by some other cells and it plays several roles in the process of wound healing. (Figure 1)

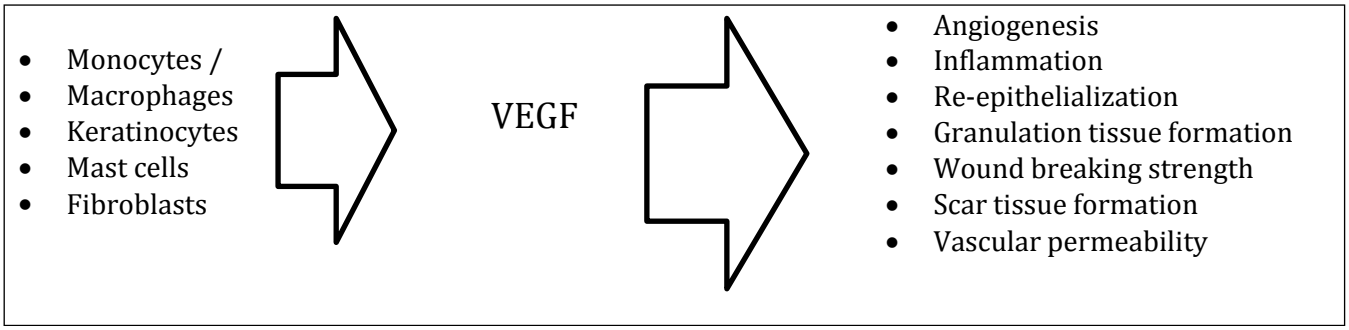

Figure 1 Cellular sources and actions of VEGF during wound healing

(Adapted from Johnson, K., E. & Wilgus, T., A. (2014)

Relationship between Glycated Hemoglobin (HbA1c) and Circulating Endothelial Cells (CECs)

Endothelial injury and dysfunction is known to influence severity of vascular complications of diabetes. When endothelial cells contact with increased blood glucose levels, it causes to produce excess reactive oxygen species (ROS) in endothelial cells. Not only in the high blood glucose status, even in the well-controlled blood glucose status, endothelial dysfunction is occurs due to reduction in antioxidant reserves. Reactive oxygen species mainly disturbed to endothelial dysfunction including abnormalities in cell function (Zou et al., 2002) and delayed replication. Further, circulating endothelial cells (CECs) is known to be the cause for vascular damage.

Blood sugar / HbA_{1C} control and wound healing

Glucose control is the most vital metabolic factor in managing the patients with diabetic foot ulcers and HbA_{1C} is known to be the best indicator in evaluating glycemic control over a period of time (90 day span) (Yazdanpanah, Nasiri et al. 2015). Glycosylation of haemoglobin in red cells is increased parallel to increased HbA_{1C} level. Increased blood glucose level > 11.1 mmol/L (equalent to HbA_{1C} level >12%) is affected to decline the function of neutrophils including leukocyte chemotaxis. In addition, increased blood glucose level is linked with

hindering inflammatory responses and reducing the host response to an infection. Relationship of hyperglycemia was further confirmed with reporting it as an independent risk factor for the development of infection (Pomposelli, Baxter et al. 1998). A retrospective study (Humphers, Shibuya et al. 2014) included a cohort of patients (n=322) diagnosed diabetes mellitus after foot and ankle surgeries. In this study, in each increase of 1% HbA_{1C} level increased the infection by odds of 1.59. It is also reported that, with each 1% of increased $HbA_{1C,}$ wound healing complications also increased (odds ratio, 1.25; 95% CI, 1.02–1.53). Markuson et al retrospectively studied 63 patients (age ranged 33-94 years) with either type 1 and 2 diabetes to investigate the association between HbA_{1C} and healing times of leg and foot ulcers. Patients' mean HbA_{1C} values was 8.05 (SD = 2.29, range 4.5-15.4). Higher healing rate (77.8%) was achieved by patients with type 1 diabetes than patients with type 2 diabetes (53.7%). Ulcer healing times were found to be decreased in patients who had lower HbA_{1C} levels as well. (Markuson, Hanson et al. 2009).

Best practice guidelines for ASEANPlus (Nather, Soegondo et al. 2015) has recommended glycemic targets to control patients with diabetic ulcers. Glycemic target for critically ill patients, other hospitalized patients and relatively well patients are 140-180 mg/dL, <140 mg/dL (pre meal glucose) and <130 mg/dL (pre meal glucose) respectively. The preferred recommended HbA_{1C} target for home managed patients is 7%.

As a key player in the wound care team, nurses should possess proper awareness on ulcer healing and its deviations. This brief article provide you with a basic idea on ulcer healing, functions of some cells and associations between blood glucose/ HbA1c status and wound healing. As a nurse it is essential to apply this knowledge when managing the patients with ulcers.

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Hands on Glasgow Coma Scale

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Glasgow Coma Scale (GCS) is a tool which describes the level of consciousness in patients with brain injuries. It is also used as a common language to report the neurological status of a patient. The GCS tool was developed in 1974, by Graham Teasdale and Bryan J. Jennet, Professors of Institute of the Neurological Sciences, University of Glasgow.

No instrument is needed to assess GCS, except the skill for using this tool. Therefore this tool can be used anywhere at any time. Generally this tool is used for patients with traumatic brain injuries. Most commonly this tool uses in emergency departments and Intensive Care Units (ICUs). An accurate consistence assessment of GCS guides to identify the improvement or deterioration of the patient's condition which is crucial for decision making.

GCS consists of three components; best eye response, best verbal response and best motor response. Also each of these components has sub domains which have separate scores. Total of the best response of each component is considered as the score of GCS.

GCS Score

score	Best Eye Response	score	Best Verbal Response	score	Best Motor Response
4	Spontaneous eye opening	5	Oriented	6	Obeys command
3	To speech	4	Confused	5	Localizing
2	To pain	3	Inappropriate	4	Withdrawal
1	None	2	Incomprehensible	3	Flexion(decorticate)
		1	None	2	Extension(decerebrate)
				1	None

It is ranging from 15/15 (all three responses are normal) to 3/15 (no response). [redacted] Further, severity of the condition can be categorized as follows

Score of GCS	Severity
GCS 15 -13	Mild
GCS 12 – 9	Moderate
GCS ≤ 8	Severe

Eye opening

An assessment of eye opening reflects the level of arousal and wakefulness. This indicates the integrity of the reticular activating system of the brain (Hickey 2009).

4 • **Spontaneous -** Open the eyes **without any verbal or pain stimulation** and aware of the surrounding (response by moving eyes to capture the surrounding things).

3 • **To Speech -** Open the eyes to **verbal stimulation** (first talk in normal voice if no response talk louder by his/her name and ask to open the eyes). Be careful to avoid touching the patient in this stage.

2 • **To Pain -** Start this assessment **with touching /shaking** the patient. If no response give **painful stimuli**.

1 • **None -** Patient does **not response to pain**.
• If patient cannot open the eyes due to eye injury document it as C/C1/ NT(not testable) in this column.

Verbal responses

An assessment of verbal response reflects the integrity of higher cognitive and interpretative centers of the brain (Waterhouse 2008). It indicates the function of language centers, Wernicke's speech center in the temporal lobe and Broca's speech center in the frontal lobe of the brain (Woodward & Waterhouse 2009).

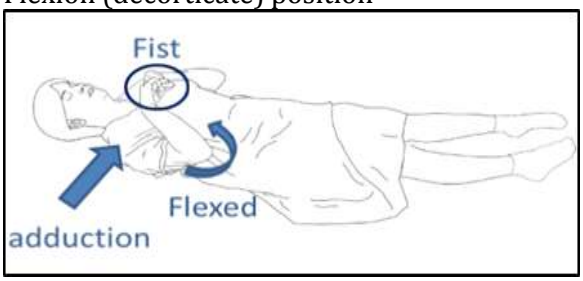
5	• **Oriented - Patient's orientation of person, place and time**. • person - his/her name, place - where are you? time - current year/month/time
4	• **Confused -** Patient gives wrong answers to one or more of the above questions, but he/she is **able to make sentences and continue conversation**.
3	• **Inappropriate -** Patient is unable to build a sentence but able to **speak random words or repeat phrases clearly.**
2	• **Incomprehensible -** No clear words or phrases, just **sound only** such as groaning, moaning, or mumbling
1	• **None - no sound** even for pain. • If patient cannot producce any sound due to ET/Trache tube note it as T/T1/NT

Motor responses

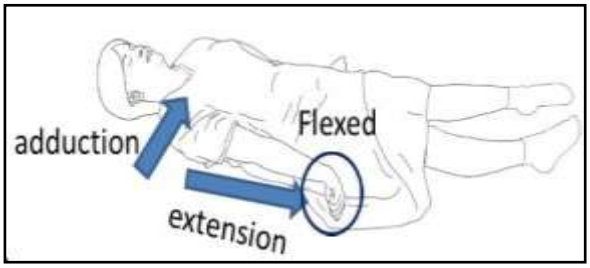
An assessment of motor response reflects the function ability of the cerebral cortex (Hickey 2009). Motor response is the most difficult and important portion of the GCS assessment (Heron et al. 2001, Barlow 2012).

6	• **Obeying Commands - Obeying verbal commands such** as; elevate you left/right arm/leg, open your mouth, and put your tongue out… • Avoid giving command to move disabled/ injured limbs.
5	• **Localizing - Identify the pain and location** of pain application and try to remove it. • If patient moves the hand above the chin level when applying pain to orbital ring it can be consider as localizing (Waterhouse 2009).
4	• **Withdrawal - Identify the pain but cannot identify the location** of pain application. • Patient moves his/her arm away from the pain application area.
3	• **Flexion -** response for pain by making the **posture of flexed elbow with shoulder adduction, wrist flexion with fist hand, slowly.** • Flexion indicates damage of corticospinal tract (Hickey 2009).
2	• **Extension -** response for pain by **posture of extended limbs with shoulder adduction, wrist flexion with fist/extend fingers .** • This posture of the patient indicates the damage to the diencephalon mid-brain, or pons (Hickey 2009).
1	• **None - No adequate or any movements for pain.**

Flexion (decorticate) position



Extension (decererbrate) position



Source: Guideline for Basic Adult Neurological Observation

Stages of Assessment

1. **Check**
    a. Pre-existing limitations such as language and cultural differences, intellectual/neurological deficit, hearing loss or speech impairment
    b. Effects of current treatments such as intubation, tracheostomy, and sedation
    c. Effects of other injuries such as fractures and spinal cord damages
2. **Observe**; spontaneous behaviour for each of the three domain of the scale. If no response, use stimulation.
3. **Stimulation;** apply stimulation from low to increase intensity until the response is obtain or to upper cut off point to identify that there is no response. First use auditory stimulus if no response then use physical stimulus (normal voice ⟶ loud voice, light touch⟶ painful stimuli)
4. **Rating;** give the relevant score for best response of each component. Total score of the GCS communicates the quick overall level of consciousness. Also it is important to communicate the score of each component separately especially in GCS less than 15/15 as for example 13/15 (E- 4, V-4, M- 5).

Application of painful stimuli

Before applying pain stimulation,

- Inform relatives/friends (if they are present with patient) about why you are giving pain.
- Assess and observe the patient's past medical history and present injuries. If patient has/is suspected for any injury please avoid giving pain to that area.
- Choose the best place to apply pain according to the above information.

Recommendation for application of pain (Teasdale, Allan, Brennan, McElhinney, and Mackinnon, 2014)

1. Fingertip (peripheral of the body)
2. Trapezius muscle
3. Supraorbital notch } (Central part of the body)

Peripheral Stimulation

- Use peripheral stimulation as a first stimulation to assess eye response. Thereafter if needed go to central stimulation for additional information related to motor response.
- Pressure on finger nail is recommended. Because finger nail is safer place to prevent probable damage due to undue force (waterhouse 2009).
- Give pressure on 10 – 15 second with use of pen/pencil.
  .
- To minimize potential harm can vary the finger in consistence assessment

Central Stimulation

1. Trapezius muscle pinch stimulates the XI cranial nerve of the body. Using the thumb and other two fingers hold about two inches of the muscle located at the angle of neck and shoulder space. Apply the pressure gradually by twisting the muscle 10 to 20 seconds.
2. Supraorbital pressure stimulates the V cranial nerve of the body. Locate the supraorbital notch, keep the flat of thumb on the lower edge of the upper rim of the orbit and move the inner part of the eye brow until the groove is felt. Apply the pressure gradually 10 to 20 seconds. This site should not be used on the patient's with orbital, skull and facial bone fractures

Alternative methods of applying central pain

1. Jaw margin pressure

It stimulates the cranial nerve V. Apply pressure behind the angle of the jaw at maxillary-mandibular joint for 10 – 20 minutes gradually. It is difficult to apply accurately. Therefore not recommended for routine use.

Fingertip pressure Trapezius pinch Supra-orbital notch

Source: International Journal of Advanced Nursing Studies

2. Sternal rub

It is given by grinding pressure on the sternum by using knuckles of a clenched fist. This stimulation is strongly discouraged due to potential severe bruising, residual pain and discomfort (Shah 1999).

The above GCS scale can be used on children age over five years. It is difficult to assess the younger children and infants in the same way. Therefore there is several coma scales for younger children and infants which has a modified assessment of verbal and motor response.

Nurses are the frontline professionals who are able to detect the changes of patient's conscious level. Therefore they must have proper knowledge and skills to assess GCS. Early detection of the changes of the conscious level is important to make a decision to prevent secondary brain damage/irreversible damage and improve the patient's outcome.

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