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KINGDOM OF SAUDI ARABIA

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## ABOUT THE NEWSLETTER

“By providing important and relevant information to healthcare providers, this Newsletter aims to enhance communication of quality and patient safety information, raise awareness of reported adverse events and maintain an ongoing link to all the medical departments of the National Guard Health Affairs (NGHA) facilities. “



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# A SAFE NURSE always ensures SAFETY FIRST: Vital Signs...What are they ... and ... are they really that important?

Manny Mortell; Nurse Specialist Critical Care - Nursing Services: Center of Nursing Education, MNG-HA

## Introduction

The intent of this article is to emphasize the importance to think critically as an effective healthcare provider and rescue the patient and to implement the *HRO journey which advocates patient safety*. Consequently, this article will focus on a back-to-basics approach, stress the significance of vital signs and observations, and emphasize the importance of escalation to rescue the patient for any concerns that you may have as a healthcare provider.

## Background

A serious adverse event is defined as an untoward occurrence that results in death; is life threatening; requires prolongation of current hospitalization; results in persistent or significant disability or incapacity (National Patient Safety Agency, 2009); results in an avoidable in-hospital cardiopulmonary arrest; and requires urgent and unanticipated admission to an intensive care unit (Smith, 2006). Serious adverse events can be prevented by limiting human error (Wilson, 1999); such as recognizing the *early warning signs* of a patient's clinical deterioration and responding appropriately. Serious physiological anomalies often precede cardiopulmonary arrest, unanticipated admission to an intensive care unit (ICU) or death (Krause, 2004). *Warning abnormalities* in the vital signs / observations are often detected before adverse clinical events occur (Harrison, 2005), *within 6 to 8 hours* (Schein, 1990) of cardiac arrest, especially if hypoxemia and hypotension are not identified and treated (UK, Resuscitation council, 2010). It is the nurses' professional responsibility to comprehend the significance of vital signs (South African Nursing, 2004) as *patient safety often depends on the escalation* of the concerns of nurses (Cioffi, 2000).



One of the 'traditional' roles of the nurse is to observe, for during surveillance of the patient, a nurse can detect early clinical changes and therefore protect their patients from potential harm (Rogers, 2008). For more than 100 years, nurses have monitored their patients using the standard vital signs (Ahrens, 2008), which provides important data about the patient's health and 'wellness'; and in actuality, are called '*vital*' which has a meaning 'of life'. Recording of vital signs is therefore universal, and the frequency of implementation depends on the condition of the patient and policy and procedural guidelines. The rationale however remains basic, to determine if the vital signs are abnormal and potentially life threatening, as they indicate a probability of survival. Recognising abnormal vital signs and observations; therefore provides a *valuable, early alert system*, which must be escalated once identified. A patient's condition can *deteriorate quickly* and potentially result in death. Although, this is more likely to occur in an acute care setting, such as ICU or the emergency department, it can occur in any setting. In many instances, *patient deterioration* appears to happen quickly, but often; this is *not the case* and actually commences *up to 24 hours prior to the critical event* and a Code blue being activated.

Health care professionals measure and record vital signs to assess, monitor, evaluate and document an individual's physiological status or change in condition (Royal College of Nursing, 2011) and can assist the health care provider to recognize a deteriorating patient and allow time to escalate to a Critical Care Response Team (CCRT), before respiratory, cardiac or cardiopulmonary arrest occurs. A global concern exists in healthcare; that nurses', often *fail to grasp the importance of monitoring* the patient's vital signs (National Patient Safety Agency, 2009; Goldhill, 2006) and *repeatedly regard them as routine*, with low priority and consequently when vital signs becomes routine, their importance maybe forgotten.

## What are "standard" vital signs?

There are *four standard, vital signs*, which include; temperature, pulse, respiration (breathing) and blood pressure. There are also *additional vital signs* which could be considered by the nurse as a healthcare provider, depending on the acuity of their patients and the healthcare setting. These include, pain assessment (JCOHA, 2001; APS, 1995), pulse oximetry, the Glasgow Coma Scale, capnography, the blood glucose level and even physical distress (Howell & Olsen, 2011).

Normal vital sign parameter ranges presume that the patient is:

1. Resting: *Without any stress/distress.*
2. Considers the actions that the patient is demonstrating: *Anxiety, restlessness*
3. Considers the context of "normal" for that patient: *Chronic disease, such as COPD*

## What are the 4 "standard" Vital Signs?

### The 1<sup>st</sup> vital sign: Temperature (T)

Normal core body temperature (**36° - 37.5° C**) is the product of metabolism which is regulated by the hypothalamus in the brainstem. Recording the temperature provides an indication of core body temperature, which is normally narrowly regulated (thermoregulation). *Extreme body temperatures (less than 21° C and greater than 43° C are potentially fatal).* Temperatures below 32° C cause cardiac arrhythmias, such as atrial fibrillation, ventricular fibrillation, asystole while temperatures above 40° C cause seizures.



**Remember 1:** Look and feel at the skin (the largest organ in the body), it should be the natural color for the specific ethnic group; warm, dry, with normal turgor and capillary refill time.

**Remember 2:** Don't ignore any changes that concern you and escalate till proven OK.

The primary reason for monitoring body temperature is to identify signs of infection or inflammation early (Fever greater than 37.5°C, hyperthermia greater than 40°C).

Hypothermia (less than 36°C) also requires recognition and reversal, unless there is a therapeutic rationale, such as post cardiac arrest resuscitation (AHA, 2010).

### The 2<sup>nd</sup> vital sign: Pulse (P)

The normal pulse rate and rhythm is an indication of the heart pumping blood into an artery. It is a palpable sensation felt over an artery which is normally strong, regular, but the rate varies with age. Pulse rate is not the same as heart rate (There can be a pulse deficit).

At rest and no distress (NS:CNE, ECG courses, 2015)

*Neonate (Newborn – 1 year) 100 – 150 beats per minute*

*Infant / Child (1 year – 3 years) 80 – 120 beats per minute*

*Child / Adolescent/ Adult (greater than 3 years) 60 – 100 beats per minute*





**Remember 1:** Tachycardia is a compensatory body defense mechanism – ‘fight or flight’ response. The body is telling you that something could be wrong.

**Remember 2:** Don’t ignore any irregularity/difference in pulse/heart rate, escalate until proven OK.

*Tachycardia / Bradycardia / Irregularity*, could identify a potential dysrhythmia such as atrial fibrillation, which is common in adults, and is associated with uncontrolled hypertension (Madoc-Sutton, 2009) and is a significant risk factor for stroke (AHA, 2010) and should be escalated if identified (In charge/Doctor/CCRT).

### The 3<sup>rd</sup> vital sign: Respirations / Breathing Rate (R)

The normal breathing rate, rhythm and effort are an indication of normal ventilation (air moving in and out of the airways). It is quiet, regular, and effortless, and varies with age and is often ignored (Cretikos, 2008). The respiratory rate is often *the first vital sign to change*, therefore a very useful early warning sign, *even a 3 – 5 breath rate change* maybe important.

At rest and no distress (Modified from AHA, ACLS/PALS, 2010)

*Neonate (Newborn – 1 year) 30 – 40 breaths per minute, quiet, regular, slight abdominal effort*

*Infant / Child (1 year – 3 years) 20 – 30 bpm, quiet, regular, effortless*

*Child / Adolescent/ Adult (> 3 years) 12 – 20 bpm quiet, regular, effortless*

**Remember 1:** Tachypnea is a compensatory body defense mechanism – ‘fight or flight’ response. Do not ignore it.

**Remember 2:** Normally you cannot see or hear if someone is breathing, they don’t use accessory muscles, they do not make any noise, they do not mouth breathe. If they do, be concerned and escalate till proven OK.

Tachypnea / hyperventilation could identify a potential problem, which should be escalated if identified (In charge/Doctor/CCRT) before bradypnea / hypoventilation or apnea occurs.

### The 4<sup>th</sup> vital sign: Blood Pressure (BP)

The BP is measurement of the heart (workload) pumping blood (emptying) into an artery (Systole/systolic) and the artery relaxing after contracting while the heart is filling (Diastole/diastolic). It normally varies with age; the younger, the smaller the BP, as you get older it becomes higher.

For example: At rest and no distress (Modified from AHA, ACLS/PALS, 2010)

*Neonate (Newborn – 6 months) ~ 60/40 – 70/50 mmHg*

*Infant / Child (1 year – 10 years); 70 + Age X 2 (systolic)*

*Adolescent/ Adult ~120 / 80 (100) mmHg*

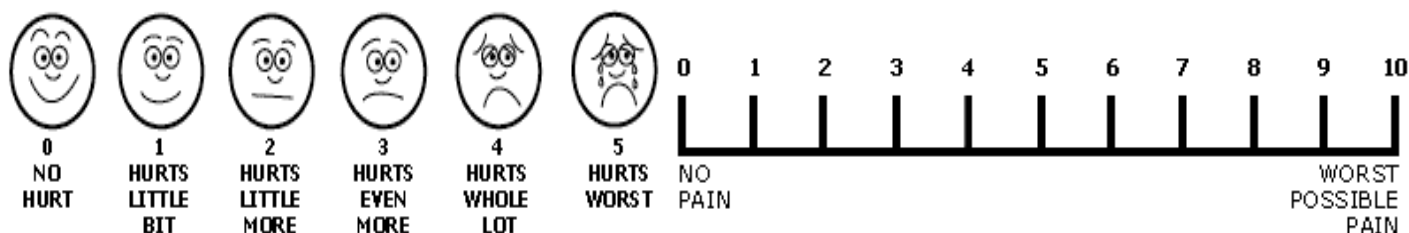
**Remember 2:** Accurate recording of BP requires 3 things, no clothing on the recording limb, the proper sized cuff, correct placement of the cuff.

Hypertension / Hypotension could identify a potential problem, which should be escalated if identified (In charge/Doctor/CCRT) before stroke or shock signs and symptoms occur.

**Other dimensions for vital signs include:**

### A. Pain Score

Pain assessment as a vital sign was introduced by the American Pain Society (1995) and endorsed by JCAHO (2001, 1999). As a vital sign, pain serves as a **caution – warning sign** and unlike the 4 standard vital signs – TPR and BP, which are objective, measurable and quantifiable signs, pain is really a symptom, more subjective and more difficult to quantify. Therefore, identifying pain and classifying it accordingly remains a challenge for many health care providers. The inability to assess pain effectively and therefore treating the cause of the pain, remains a concerning barrier to patient safety. The following tools assist the nurse to assess pain closely. These pain assessment tools include; F.L.A.C.C, C.R.I.E.S, and the Wong-Baker faces for patients that are not able to communicate effectively, which may include adult patients (ICU, intubated and ventilated) and pediatric patients (too young to speak or comprehend). Also tools such as W.I.L.D.A and the numerical scale for patients that can communicate effectively, which typically will be adolescents or adults.



### B. Pulse Oximetry (SpO2)

Many clinicians have referred to pulse oximetry as the **5<sup>th</sup> or 6<sup>th</sup> vital sign** (Neff, 1988). Whether pediatrics or adults, hypoxemia is a potential dilemma if not related to an established chronic/congenital pathophysiology, and therefore, could have catastrophic consequences if not identified and treated early.

The normal peripheral oxygen saturation value (SpO2) breathing room air (~ 21%) is **94 – 100%**. If the SpO2 is less than 94%, breathing room air this results in hypoxemia; if the SpO2 is less than 90% breathing room air this results in severe hypoxemia (AHA, ACLS/PALS, 2010) and must be escalated and treated if identified (Doctor/CCRT).



**Remember 1:** Accurate recording of SpO2 requires the correct probe, correct placement of the probe and normal tissue perfusion to the arterial pulse being monitored.

**Remember 2:** If administering oxygen; ensure that the SpO2 is between 94 – 99% (not 100%),. 100% may cause Hyperoxemia and therefore potential oxygen toxicity (AHA, ACLS/PALS, 2010).

### C: Coma Score

The Glasgow Coma (GCS) scale or the Simplified Motor Score (SMS)

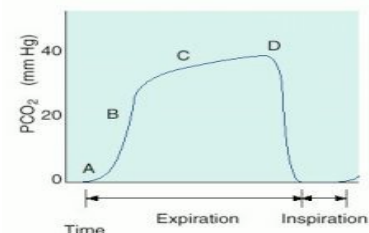
There have been numerous studies ( Davis et al, 2006; Al-Salamah et al, 2004; Healey et al, 2003; Norwood et al, 2002), that have considered the GCS as a potential vital sign when assessing the level of consciousness, the most significance predictor of outcomes **motor response**. Based on these findings, a more simplified tool has been recommended (Haukoos et al, 2007), which has 3 criteria to be assessed.: **Obeys commands – Best - 2 points;**

*Localizes for pain – 1 point; withdraws / no response to pain – Worst - 0 points.* The SMS tool simplifies the GCS into its most valid component as a predictor of injury severity.

Glasgow Coma Score		
Eye Opening (E)	Verbal Response (V)	Motor Response (M)
4=Spontaneous 3=To voice 2=To pain 1=None	5=Normal conversation 4=Disoriented conversation 3=Words, but not coherent 2=No words.....only sounds 1=None	6=Normal 5=Localizes to pain 4=Withdraws to pain 3=Decorticate posture 2=Decerebrate 1=None

### D: Capnography - Monitoring End-Tidal CO<sub>2</sub> (ETCO<sub>2</sub>)

Capnography or ETCO<sub>2</sub> monitoring, has been included in this article for 'completeness' and is a vital sign that monitors carbon dioxide (CO<sub>2</sub>) removal during ventilation (spontaneous or assisted). As a vital sign, it has demonstrated a positive monitoring benefit during resuscitation in cardiopulmonary arrest, management of patients in the critical care arena and treatment of chronic lung disorders, such as acute asthma. The normal ETCO<sub>2</sub> ranges between 35 – 45 mmHg.



### Trends in the vital signs, what can they tell you?

Subtle changes in the patient's vital signs occur gradually and trending provides an opportunity to compare previous observations with the current vital signs that were recorded. *A single set of vital signs may not identify or alert you to a problem.* Vital signs should be assessed frequently for patients that are unstable or potentially unstable, as they can identify clinical condition changes which could result in a life threatening state.



Take for example, a stable patient who has returned from the operating room via the Post Anesthetic Care Unit (PACU) to your ward following a total hip replacement.

1. **Initially** the vital signs were:

T: 36.8 ° C, Pulse 86 beats per minute, RR: 14 bpm, BP: 110/75, SpO<sub>2</sub> 96% (Air), Pain free  
Alert and orientated, warm and well perfused.

2. **15 minutes** following return to the orthopedic ward Vital Signs were:

T: 37.0 ° C, Pulse 116 beats per minute, RR: 24 bpm, BP: 140/100, SpO<sub>2</sub> 94% (Air), Pain free

Alert, orientated, *restless, cool skin and capillary refill time 4 seconds*

3. **30 minutes** following return to the orthopedic ward Vital Signs were:

T: 37.2 ° C, Pulse 126 beats per minute, RR: 30 bpm, BP: 100/80, SpO2 92% (Air), Pain free

Alert, orientated, *anxious, cool skin and capillary refill time 5 seconds*

4. **1 hour** following return to the orthopedic ward Vital Signs were:

T: 37.0 ° C, Pulse 135 beats per minute, RR: 34 bpm, BP: 80/60, SpO2 92% (Air), Pain free

Alert, orientated, *anxious, cool, clammy, moist skin and capillary refill time > 5 seconds*

**Can you see** a trending of vital signs that should have been escalated (Doctor / CCRT)?

### **Trends in the vital signs, predict patient outcomes?**

The predictive value of abnormal vital signs for patient morbidity and mortality is well established (Bleyer et al, 2011).

1. Temperature less than 35° C or greater than 38.9° C

2. Pulse rate greater than 120 bpm

3. Respiratory rate less than 12 or greater than 24 bpm

4. Systolic blood pressure less than 85 mmHg

5. SpO2 less than 91 mmHg

6. Level of consciousness other than alert and orientated

The occurrence of anyone of these abnormal vital signs has a 0.92% prognostic mortality. However, 3 of these combined abnormal vital signs has a *prognostic mortality of 23.6%*.

### **Conclusion**

Historically, patients have relied on dedicated and skilled healthcare providers to ensure their safety when admitted to a hospital for treatment. Given the importance of recognising and escalating abnormal vital signs, it can be argued that the *knowledge required to identify concerns in vital signs is mandatory for all nurses*. It is essential that the nurse is able to measure and record the vital signs correctly, interpret the measured values, comprehend their significance, and communicate the findings appropriately, escalating their concerns if any. Recommendations in the literature indicate that measurement and comprehension of vital signs should be evaluated on a regular basis as a competency for nurses (Tomlinson, 2010) as they impact profoundly on medical and nursing management decisions relating to patient care, positive health care outcomes and patient safety issues. The aptitude to measure and record vital signs *is not "high tech stuff"* but requires the nurse to recognize patient deterioration, comprehend an urgency to escalate their concerns, and communicate those concerns effectively, confidently, and transparently (*JCI- IPSPG# 2*) in order to *rescue a patient who could be at risk*.

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# Building Patient Safety Culture: Everyone Has a Role To Play

**Souzan M. Alowesie, RPh, CPHQ**

**Manager, Quality Management Department-CR**

**Team Leader, Patient Safety Culture Assessment and Improvement**

Over the past 10 years, MNGHA has come a long way to inaugurate a working culture that goes above and beyond using evidence based clinical practices to improve outcomes. A variety of approaches have been suggested and implemented to identify ways to improve patient safety and quality care. Some of these approaches are not only limited to implementing The Joint Commission International (JCI) standards; continuous review process of patients' Mortalities and Morbidities for quality and appropriateness of care and working with front-line staff to improve different aspects of care at local units/departments. All of these are just a few examples of our endeavor towards a high level of patient safety. Though, measurable and remarkable improvements have been achieved regarding many aspects of patient safety, yet, the sky is the limit, and we are continuously looking for Excellence. More recently, MNGHA (as many health care organization) has started to realize that limiting initiatives to improving the "Hard" aspects of care is not enough and will not take healthcare to where we desire to be; a High Reliability Organization (HRO). Three main requirements<sup>1</sup> are suggested for health care organizations to become highly reliable: leadership commitment to the goal of high reliability, the organizational culture that supports high reliability must be fully implemented, and adapting the tools of robust process improvement. The aviation industry, which manages great hazard extremely well, has managed to identify the secret for this difficult equation by investing in, and establishing framework for SAFETY CULTURE.

MNGHA leadership realized that we need to start working on improving the "Soft" aspect of care (Culture of Safety) more than ever before, starting with a reliable measurement of this culture to understand Where Are We? (Figure. 1). Assessment of the staff beliefs and attitudes about patient safety in the workplace has been shown to provide an indication of the likelihood of errors and injuries<sup>2</sup>. MNGHA has partnered with an international agency to conduct a Patient Safety Culture Survey across all MNGHA organizations in October 2014. 225 clinical units and more than 7,000 staff across MNGHA facilities have participated in administering this survey over the past couple of months. The response rate was significant (70%) and the average overall score for MNGHA (42%), which represents percentage of people who positively answered with "Agree/ Strongly Agree" throughout all survey domains. Our overall score results is below the threshold of risk (score below 60%), however; the results showed that we have exemplary settings of excellence that we can learn from and build on their experiences in certain aspects of culture. Overall, the survey results helped us to study staff beliefs and attitudes about Patient Safety within clinical areas, and identify strengths as well as the opportunities for improvement in each clinical setting. Moreover, the qualitative comments and the front-line staff feedback during the survey results debriefing sessions have outlined common safety themes. The results were an eye-opening for the leadership on many aspects of the health care system and the process, that need attention and improvement (**Figure2. Results of Average Score For MNGHA Safety Culture-Seven Safety Domains in 2010 and 2014**).

## What's Next:

Everyone has a role to play: hospital leaders, executives, managers, clinical and non-clinical staff, you and me; if we want to improve our patient safety culture and minimize the likelihood of errors and injuries. Manager should meet with staff to share insights from the debriefing sessions, clarify questions, drive group discussion and decide on item(s) to work on as a Team. Executives and leadership should assess, analyze

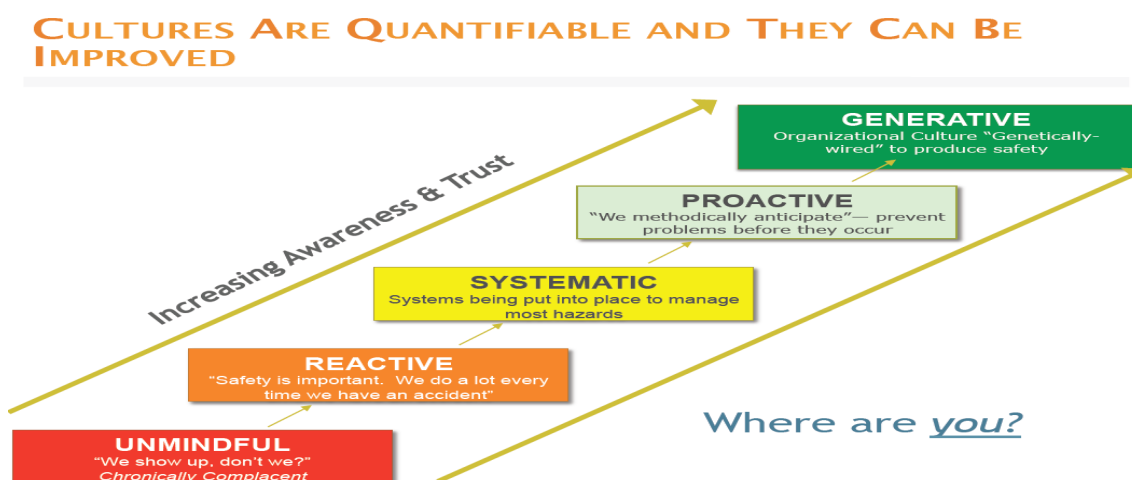


and prioritize the common identified themes during the debriefing sessions and resolve the most frequent-high risk issues that are clearly threatening the safety culture. Ensuring and promoting a Fair and Just Culture and maintaining transparency at the Micro and Macro level are also fundamental to improving safety culture. Front-line staff should understand that respect must be NON-NEGOTIABLE and should direct every interaction between every staff member every time.

Sometime during the Last Quarter of 2016, staff will participate in a re-survey in order to assess the effectiveness and sustainability of everyone's initiative to improve the culture of patient safety.

**"CREATING A CULTURE OF SAFETY IS The Foundation TO HIGH RELIABILITY HEALTH CARE"**<sup>1</sup>

**Figure1. Where Are We In Relation to Culture Maturity**



**Figure2. Results of Average Score For MNGHA Safety Culture-Seven Safety Domains in 2010 and 2014**



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# GENERIC NAME VS. TRADE NAME

By Dr. Gregory Poff

Chairman

Saudi Medication Safety Center, Ministry of National Guard Health Affairs



As students we have all been taught generic names, but as practitioners many of us fall into the unfortunate practice of using brand names.

In general, the brand name (also called the trade name) of a drug is easier to remember, to spell and to pronounce than is the generic name. The brand name is created by the manufacturer – often with help from marketing experts. Drug companies can spend up to U\$ 1 million dollars to come up with just the right name. Drug companies want their products to be known by the exclusive brand names they create rather than the generic names, which competitors can use to market their version of a drug later. For this reason, you will rarely hear an advertisement for a generic drug or hear a pharmaceutical company use the generic name.

Drug advertisements, which are a primary source of pharmacologic information for many healthcare professionals, feature brand names. Drug ads will go out of their way to link a drug's brand name with the condition it treats. As a result, the practice of using the brand name becomes habitual.

Chemical name	Generic	Brand
N-acetyl-para-aminophenol	acetaminophen	Tylenol
N,N-dimethylimidodicarbonimidic diamide	metformin	Glucophage
(3R,5R)-7-[2-(4-fluorophenyl)-3-phenyl-4-(phenylcarbamoyl)-5-(propan-2-yl)-1H-pyrrol-1-yl]-3,5-dihydroxyheptanoic acid	atorvastatin	Lipitor
(R,S)-4-hydroxy-3-(3-oxo-1-phenylbutyl)-2H-chromen-2-one	warfarin	Coumadin
(R,S)-1-(isopropylamino)-3-[4-(2-methoxyethyl)phenoxy]propan-2-ol	metoprolol	Lopressor

The use of brand names, however, makes the promotion of rational medication use more difficult by clouding and confusing the relationship between medications within the same group.

This is further complicated by the lack of standardization of drug trade names internationally. For example, in the United States, "Flomax" is a brand name for tamsulosin, a treatment for an enlarged prostate, while in Italy, the active ingredient in the product called "Flomax" is morniflumate, an anti-inflammatory drug. In the United States, "Norpramin" is the brand name for an anti-depression drug containing desipramine but, in Spain, the same brand name, "Norpramin," is used for a drug that contains omeprazole, a treatment for stomach ulcers.

A credible case can be made for the use of generic drug names. Patients' safety is the primary argument in favor of using generic names. Generic names are more meaningful. Drugs that have similar actions may share a part of their generic name, called a "stem":

- "-pril" Medications including enalapril, lisinopril, and captopril, among others, treat high blood pressure, heart disease, and kidney problems. They are all ACE-Inhibitors, so-named because they all inhibit the enzyme, angiotensin-converting enzyme.
- "-statin" These cholesterol-lowering drugs all inhibit a particular enzyme (i.e., HMG coA reductase) that is important in cholesterol synthesis. Examples include atorvastatin, lovastatin, and pravastatin, among others.
- "-cillin" This stem refers to a group of closely related antibiotics, including penicillin, ampicillin, amoxicillin, among others.
- "cef-" A group of antibiotics, called cephalosporins (e.g., ceFAZolin, cefotaxime, cefaclor) use the "cef" stem at the beginning of the name (as a prefix), rather than at the name's end (as a suffix).

Stem	Definition	Generic Name	Brand Name (Examples)
-arabine	Antineoplastics (arabinofuranosyl derivatives)	Fludarabine	Fludara
-barb	Barbituric acid derivatives	Phenobarbital	Solfoton
-cillin	Penicillins	Amoxicillin	Augmentin
-cycline	Antibiotics (tetracycline derivatives)	Minocycline	Dynacin
-oxacin	Antibacterials (quinolone derivatives)	Ciprofloxacin	Cipro
-oxetine	Antidepressants	Fluoxetine hydrochloride	Prozac
-sartan	Angiotensin II receptor antagonists	Losartan potassium	Cozaar

Since the drugs in a therapeutic category often have similar generic names, due to the use of "stems" as part of the generic name, use of generic names can promote the acquisition of a pharmacologic knowledge base. Stems make it possible to identify the type of medication from its generic name even when you never heard of that particular drug. For example, compare the similarity among the following anti-anxiety hypnotics of the benzodiazepine class, and note the diversity of brand names:

#### Generic Name

Diazepam

#### Trade Name

Alupram, Atensine, Evacalm Solis, Stesolid, Tensium, Aliseum, Amiprol, Ansiolin, etc (**344 different brand names** listed in Martinsdale, The Complete Drug Reference)

Oxazepam

Oxamid, Adumbran, Alepam, Alopam, Anxiolit, Aplakil, etc (**97 different brand names** listed in Martinsdale, The Complete Drug Reference)

Lorazepam

Ativan, Almazime, Alzapam, Aplacasse Control, Donix, etc (**146 different brand names** listed in

	Martinsdale, The Complete Drug Reference)
Temazepam	Restoril, Normison, Cerepax, Euhypnos, Lenal, Levanxene, etc ( <b>59 different brand names</b> listed in Martinsdale, The Complete Drug Reference)
Flurazepam	Dalmane, Benozil, Dalmadorm, Dalmate, Dormodor, etc ( <b>39 different brand names</b> listed in Martinsdale, The Complete Drug Reference)
Bromazepam	Lexotan, Bartul, Brozam, Compendium, etc ( <b>114 different brand names</b> listed in Martinsdale, The Complete Drug Reference)
Midazolam	Versed, Hypnovel, Dormicum, etc ( <b>86 different brand names</b> listed in Martinsdale, The Complete Drug Reference)
Nitrazepam	Mogadon, Remnos, Somnite, Surem, Alodorm, Apodorm, etc ( <b>81 different brand names</b> listed in Martinsdale, The Complete Drug Reference)
Alprazolam	Xanax, Tafil, Trankimazin, Valeans, Xanar, etc ( <b>213 different brand names</b> listed in Martinsdale, The Complete Drug Reference)

The beta-blockers are another example of this principle. Most scientific (non-commercial) professional publications and references currently use generic names.

It is not uncommon to discover a patient who is receiving the same drug (or class of drug) under two names; usually this occurs when there are two (2) prescribers, as when the patients is seen by physicians from two or more subspecialties.

The exclusive use of generic names can improve the accuracy of drug prescribing, dispensing and administration and improve the quality of care given the patient. Healthcare professionals cannot expect to recognize every brand name marketed. This fact is even more apparent practicing in a multicultural environment in which pharmaceuticals from all over the world are available.

Based on these observations in the literature it is prudent for the best possible patient care to encourage the use of generic names in prescribing, dispensing, and administering of medications. Generic pharmaceutical nomenclature is a concept whose time has come. It should and can be accomplished with a little effort. All healthcare professionals should make a commitment to promote the use of generic names in our practice.

This is your Newsletter and we value your comments. Please recommend Quality Improvement Projects in your area. We strongly encourage you to share patient safety information.

**Secretariat:** Office of the Chief Medical Officer (MC2211) P.O.Box 22490, Riyadh 11426 KSA

**Email:** qpsnewsletter@ngha.med.sa

**Contact No.** 011 8 0 11111 X 43518 Fax No. 011 80 11111 X 43333