
Assessment of Standardization of Healthcare Professionals in Nigeria

BY

Usoro Ekong HARRISON

Idiono Ifreke EKPA

&

Comfort Peter UDONBANG

Department of Physical and Health Education

Faculty of Education

University of Uyo, Uyo

Akwa Ibom State

ABSTRACT

Standardization is associated with uniformity. It is the process of developing and implementing standards or rules based on the consensus of different parties, that include firms, users, groups, organizations, and government. Standardization of healthcare professionals aids in determining established ethics, norms, rules and set standards to govern the different professionals in the healthcare sector. There are several professional groups in healthcare sector but the focus of this paper is on standardization of nursing professionals, medical doctors and pharmacists based on their qualifications, standardized dress codes and duties. Benefits of standardization of healthcare professionals were highlighted, conclusion made and one of the recommendations made is that healthcare professional should adhere strictly to the standardized norms and rules of their respective professional groups for effective healthcare delivery.

KEYWORDS: Standardization, Healthcare Professionals, Nigeria

Introduction

Standardization refers to the creation and use of developed guidelines for the production of uniformity in a group or organization. Timmermans and Epstein (2010) saw standardization as often being associated with the concept of sameness, suppression and/or uniformity, meaning that, standardization is thought to promote control and restraint of freedom in a group, professional or organization. It is the process of developing and implementing technical standards or rules based on the consensus of different parties, that include firms, users, groups, organizations and government.

Healthcare professionals are health service specialists who provide healthcare service to individuals at all levels of healthcare service. World Health Organisation (WHO, 2007) referred to healthcare professionals as experts who play significant roles in the advancement of Maternal, Newborn and Child Health (MNCH) and with their wealth of experience are often placed in the unique position of educating, training and preparing the environment for change in addition to influencing national healthcare policy. A healthcare professional, health practitioner or healthcare provider is an individual who provides preventive, curative, promotional, or rehabilitative healthcare service in a systematic way to people, families or

communities (Wikipedia, 2016). They operate within any or all branches of healthcare delivery, including medicine, dentistry, surgery, midwife, nursing, pharmacy, psychology, public/community health or allied health professionals.

Standardization of healthcare professionals can be seen as enhancing the portability of expertise irrespective of the country and the facility (Stephen, Swensen and Gregg, 2010). Standardization of healthcare professionals is the process of determining established ethics, norms, rules, or set standards to govern the different professionals in the healthcare sector. There are many groups of professionals in the healthcare sector. Some of which are medical doctors, nurses/midwives, pharmacists, laboratory technologists, physiotherapists, nutritionists, psychologists, and radiologists. In each of these groups, there are set rules and regulations for them to adhere to and everything about them are supposed to be in uniform anywhere a member of the same group is seen irrespective of the state or country. Each of the professionals in the healthcare sector has its own sets of identity. Professionals in all the professions have their peculiar characteristics, which could be in their qualification, dress code and the duties they perform. Standardization of three different groups of healthcare professionals, these are, the nursing profession, medical doctors and pharmacists are discussed in this paper.

Nursing Professionals

A nursing professional (nurse) is a highly skilled healthcare professional who combines the art of caring with scientific knowledge and skills developed through their education and career; a nurse is involved in the education of patients around health disease processes, health promotion, clinical procedures and management of nursing processes in the nursing profession (Nurse Info, 2007). Nurses' responsibilities vary by specialization or unit, but most share more similarities than differences. Apart from providing patients' care, they provide medications, treatment, give emotional support and advice to patients and their family members. They also work with healthy people by providing preventive healthcare and wellness information. Nurses strive to achieve the best possible quality of life for their patients, regardless of disease or disability.

A nurse is a person who has received authorized education, acquired specialized knowledge, skill, is registered and licensed with the Nursing and Midwifery Council to provide promotive, preventive, supportive and restorative care to individuals, families and communities independently and in collaboration with other members of the health team (Nursing, Midwifery Council of Nigeria (NMCN), 2016). Using standardized clinical judgement, nurses protect, promote, and optimize health, prevent illness and injury, alleviate suffering, advocate in healthcare for individuals, families, communities and populations; they are capable of accessing, planning, implementing and evaluating care independently of physicians and provide support from basic triage to emergency surgery (Crosta, 2016). More so, nurses are regarded by the public as persons knowledgeable on health matters and their opinions and advice are respected by the populace.

Qualification of Nurses

There is a standard criterion for professionalism and qualification and nurses' qualification as follows (as explained by Ikinwot, 2013):

Entry qualification into School of Nursing (3 year course for Registered Nurse Certificate) and Schools of Midwifery (18 months course for Registered Midwife Certificate) and or

University (4 year course for Bachelor of Science Degree in Nursing), with emphasizes on 3 sciences (Physics, Chemistry and Biology), Mathematics and English at credit levels.

In specialization in Nursing, a nurse becomes an expert in a particular field of nursing and gives attention to that area. The essence of specialization is to ensure that the nurse exhibits his or her expertise in the care of the patient. The recognized courses are Midwifery, Psychiatric Nursing, Public Health, Nursing/Midwifery Education, Nursing Administration, Orthopaedic Nursing, Anaesthetic Nursing Peri-Operative Nursing, Ophthalmic Nursing, Paediatric Nursing, Ear/Nose/Throat Nursing and Accident/Emergency Nursing. The duration of the course ranges from 12 months to 2 years depending on the course of study.

In the past, nurses who went in for degree in nursing specialized in nursing education, nursing administration and public health nursing. The specialization is now undertaken in master's degree and PhD programmes.

Standardized Dress Code for Nurses

Nurse's uniform is an attire worn while on duty for identification. The traditional uniform consist of shirt/trouser with smart shoes (for males) and a dress and cap with smart shoes (for females). It has existed in many variants (colour and styles), but the basic style has remained recognizable. Hospitals in many countries were free to determine the style of the nurse's uniform, including the nurse's cap, which exists in many variants. Nurses were actively discouraged from wearing jewellery, which might distract them from their purpose and get caught on patient skin during care activity; a fob watch or pendant watch is considered synonymous with nurses, it frees nurse's hands for client care and prevents the wristwatch (if worn) from becoming a vector of disease (Eve, 2010). Hair above the collar should be neat, longer hair must be tied back and clear of the face, beards should be neatly maintained, facial accessories must be kept to a minimum (Department of Health and Human Service, 2013). Wearing of large print name badges with individual nurse's full name on it, is also part of nurses uniform (Windel, 2008).

Nurses in Nigeria have the same code of dressing. A uniform should allow freedom of movement and the fabric should not chafe or induce heavy sweating and nurses should keep short finger nails (Nursing World Nigeria, 2013).

Duties of the Nurse

Ikinwot (2013) enumerated the duties as follows: nursing practice has improved with the introduction of Nursing Process and Care Plan to replace the conventional method of nursing practice where the nurse makes her own assessment, diagnosis, decides on the intervention and postulates the scientific basis of his/her action and finally evaluates the effectiveness of his/her action. Patients are now cared for by the nurses from the holistic point of view taking into consideration the Bio-Psycho-Social nature of man. The use of computer in treatment of patients, data analysis, scientific and technological changes are continuous Predicatively, Nursing Process, a model used only by the nurses is fully implemented.

Anarado (2002) wrote that the International Council of Nurses (ICN) code of ethics for nurses has four principal elements that outline the standards of ethical conduct thus:

1. ***Nurses and people:*** The nurse's primary responsibility is to people requiring nursing care. In providing care, the nurse promotes an environment in which the human rights, values, customs and spiritual beliefs of the individual, family and community are

respect. The nurse ensures that the individual receives sufficient information on which to base consent for care and related treatment. The nurse holds in confidence personal information and uses judgement in sharing the information. The nurse shares with society the responsibility for initiating and supporting actions to meet the health and social needs of the public in particular, those of vulnerable population. The nurse also shares responsibility to sustain and protect the natural environment from depletion, pollution, degradation and destruction.

2. ***Nurse and practice:*** The nurse carries responsibility and accountability for nursing practice and for maintaining competence by continual learning. The nurse maintains a standard of personal health such that the ability to provide care is not compromised. The nurse uses judgement regarding individual competences when accepting and delegating responsibility. The nurse at all times maintains standards of personal conduct which reflect will on the profession and enhance public confidence. The nurse in providing care ensures that use of technology and scientific advances are compatible with safety, dignity and right of people;
3. ***Nurse and the profession:*** The nurse assumes the major role in determining and implementing acceptable standards of clinical nursing practice, management research and education. The nurse is active in developing a core of research-based professional knowledge. The nurse acting through the professional organization participates in creating and maintaining equitable social and economic working condition in nursing;
4. ***Nurses and co-workers:*** The nurse sustains a cooperative relationship with co-workers in nursing and other fields. The nurse takes appropriate action to safeguard individuals when their care is endangered by a co-worker or any other person.

Nursing and Midwifery Council of Nigeria (2016) outlined the code of professional conduct for nurses as follows: the main purpose are to:

- Inform professional nurses of the standards of professional conduct required of them in the exercise of their professional accountability and practice; and
- Inform the public, other professions and employers of the standard professional conduct that they can expect of a Registered Practitioner;

Others are that the nurse must:

- Provide care to all members of the public without prejudice to their age, religion, ethnicity, race, nationality, gender, political inclination, health or socio-economic status;
- Uphold the health consumer's human rights as provided in the constitution;
- Ensure that the client/patient of legal age of 18 years and above gives informed consent for nursing intervention, in case the health consumer is under aged, the next of kin or the parents can give the informed consent on his behalf;
- Keep information and records of the client confidential except in consultation with other members of the health team to come up with suitable intervention strategies or in compliance with a court ruling or for protecting the consumer and the public from danger;
- Avoid negligence, malpractice and assault while providing care to the client/patient;
- Relate with a consumer in a professional manner only;
- Not take bribe or gifts that can influence preferential treatment;
- Consider the views, culture and beliefs of the client and the family in the design and

implementation of care, treatment regimen;

- Know that all clients have a right to receive information about their condition;
- Be sensitive to the needs of clients and respect the wishes of those who refuse or are unable to receive information about their condition;
- Provide information that is accurate, truthful and presented in such a way as to make it easily understood;
- Respect client's and patient's autonomy, their right to decide whether or not to undergo any healthcare intervention even where a refusal may result in harm or death to themselves or a foetus, unless a court of law orders to the contrary;
- Presume that every patient and client is legally competent unless otherwise assessed by a suitable qualified practitioner; a patient who is legally competent can understand and retain treatment information and can use it to make an informed choice;
- Know that the principles of obtaining consent apply equally to those people who have mental illness;
- Ensure that when client's and patients are detained under statutory powers (example, Mental Health Act), the nurse knows the circumstances and safeguards needed for providing treatment and care without consent; and
- Provide care in emergencies where treatment is necessary to preserve life without client's consent, if they are unable to give it, provided that the nurse can demonstrate that he or she is acting in their best interest.

Medical Doctors

Medical doctors are physicians who work in hospitals, clinics, medical centres, or private practices; they treat people for illnesses and injuries, prescribe medications, order diagnostic tests, diagnose ailments, and record patient's information; they often have specialization such as general practice, gynaecology, dermatology, paediatric medicine, orthopaedics and surgery (Study.com. A, 2016). A medical doctor is someone who maintains or restores human health through practice of medicine.

Qualification of Medical Doctors

In order to become a medical doctor and practice, one needs to obtain a degree in medicine and get a medical license. There are five standardized steps to follow before this can be achieved. Study.com. A (2016) recorded the five steps as follows:

Step 1: Earn a Bachelor's Degree: It is important that students (Ordinary Level Students) offer several science and science-related subjects, for example Chemistry, Physics and Biology. Some universities and colleges may offer a pre-medicine track that includes courses in anatomy and physiology. While in the university, the students work in medical facility as part of practical experience;

Step 2: Take the medical college admission test: Medical schools require that individuals interested in applying should take the Medical College Admission Test (MCAT). This is a multiple-choice examination that covers areas involving critical thinking, problem solving, scientific principles and writing;

Step 3: Enroll in medical school: A Doctor of Medicine (MD) programme is four years in length and combines academic course work with clinical training. The first two years of the programme teaches the students several topics including medical laws, ethics, microbiology, anatomy and physiology. The final two years are for practice and clinical rotations for

practical experiences, exposing students to areas involving surgery, paediatrics, internal medicine, psychiatry, gynecology and obstetrics. After which the student participate in a one-year internship programme.

Step 4: Complete a medical residency: After graduating from medical school, aspiring doctors must enter residency programme, which can last anywhere from 3 to 7 years depending on the specialty. This takes place in a hospital and offers opportunity for medical school graduates to begin treating patients under the supervision of an experienced doctor.

Step 5: Obtain licensure: Doctors must obtain medical licensure to practice in hospitals and other types of medical facilities. This is after passing the licensure examination.

Standardized Dress Code for Medical Doctors

Medical doctors used to be identified with wearing an overall white coat over whatever clothing they wore. For many doctors, the white coat was a badge of office that gave them room to coil their stethoscopes in one large pocket and cram books/notes in the other. But it is no longer advisable to wear the white coat. Oxtoby (2015) pointed out that the white coat was discovered to be a potential infection hazard and was permanently consigned to the laundry bin in the 1990s. This writer also wrote that wearing of ties was also discovered to be an infection risk by the early 2000s and they were now rarely worn on the wards. According to this writer, some doctors had suggested wearing jeans and white shirt; some three piece suit; some any colour down with short sleeved shirts, bare below the elbows for hygienic reasons; some favoured informal dressing believing that it makes doctors about look open and relaxed thereby encouraging and making it easier for patients to talk to doctors about intimate and difficult things; some suggested smart but professional comfortable uniform with smart shoes and standardized colour coded name badges.

Woodcock (2010) advised that medical practice administrators and human resources managers must know where to draw the line of professional dress code so the group practice projects a competent professional image to its patients and the community. This writer stressed that the professional appearance policy of doctors should also address other important details of how medical doctors should present themselves, such as:

- Clothes must be clean, neat and in good condition, without tears or obvious stains;
- Doctors must maintain clean personal hygiene, address body odours and avoid strong perfumes;
- Hair must be clean, neatly trimmed and contained in such a manner that it does not come in contact with patients;
- Hairstyles, hair colour and cosmetics should project/professional image; and
- Jewellery should be small and simple, for example, earrings may be visible on the ear only and cannot obstruct work.

Duties of the Medical Doctor

Medical doctors diagnose patient conditions using examinations and tests; based on their findings, they prescribe treatment and medications in attempt to heal any illness or injury; most doctors routinely work in teams (Study.com^B, 2016). Some doctors specialize in a number of areas like paediatrics, surgery, gynaecology, anaesthesiology, or cardiology, patients are referred to specialist depending on the particular ailment.

Doctor's schedules differ depending on the kind of medicine they practice, for example, some work in offices, others in the hospitals, some in laboratories carrying out researches, some do rounds in the hospitals, making notes on patient's physical conditions, advising patients on how to stay healthy and talking to them about further treatment, they keep up-to-date by taking classes and regularly reading books and medical journal (SOKANU, 2015). Doctors also perform surgeries and some invest time completing administrative duties such as updating patient records, returning calls or dealing with various office issues (SOKANU, 2015).

Depending on the area of specialty, some of the duties and these areas are as follows:

- *Obstetrician/gynaecologist*: Specializes in the medical and surgical care of female reproductive system and its associated disorders;
- *Paediatrician*: Provides preventive health maintenance for healthy children and medical care for children who are acutely or chronically ill;
- *Neurologist/neurosurgeon*: Specializes in the diagnosis and treatment of all types of diseases and functions of the brain, spine, peripheral nerves, muscles, and nervous system; a neurosurgeon provides surgical management of those disorders;
- *Endocrinologist*: Diagnoses and treats diabetes, hormones imbalance, thyroid diseases and other disorders of the endocrine system;
- *Orthopaedic surgeon*: Treats diseases, disorders and injuries of the musculoskeletal system; and
- *Dentist*: specializes and cares for the teeth (Beaumont Health, 2015).

Nigerian Medical Association (NMA, 2016) has standardized aims and objectives for medical professionals. These are:

- Ensure that medical and dental practitioners in this country uphold the Physician's Oath;
- Promote the advancement of health and allied sciences;
- Assist the government and the people of the Federal Republic of Nigeria in the provision of smooth, efficient and effective healthcare delivery system in the country;
- Promote the welfare and interaction of all medical and dental practitioners in the country;
- Cooperate with organizations anywhere in the world, which have similar aims and objectives; and
- Consider and express views on all proposed legislations and national issues especially those affecting healthcare delivery system, medical and dental education in Nigeria.

Pharmacists

A pharmacist is a person licensed to prepare, compound and dispense drugs upon written order, that is, prescription from a licensed practitioner such as physician, dentist or advanced practicing nurse. A pharmacist is a healthcare professional who cooperates with and sometimes advises the licensed practitioner concerning drugs. Pharmacists also known as Chemists or Druggists, are healthcare professionals who practice in pharmacy, the field of health sciences focusing on safe and effective medication use; they are members of the healthcare team directly involved with patient care (Human Resource Development Centre, 2001). WHO (2016) noted that pharmacists are the healthcare professionals that are most accessible to the public.

Qualification of Pharmacist

Qualification involves obtaining 5 credits in ordinary level in 3 sciences including English and Mathematics, obtain a Bachelor of Pharmacy Degree in University and/or 6-years first degree course leading to award of Pharm.D (Doctor of Pharmacy).

Human Resource Development Centre (2001) noted that for a licensed pharmacist, five years of education is a minimum and some curricula require six years in the university, which gives the pharmacist advanced knowledge of the chemical properties of drugs and their available dosage forms and he or she is thus qualified to play a key role in supplying information about drugs (both prescription and over-the-counter) to patients, that is, those to whom such information was most important; the pharmacist is qualified or is in an ideal position to discuss the drug with those concerned, that is including the side effect associated with the drug, its stability under various conditions, its toxicity, its dosage, route of administration and all of which may be reassuring to the patient and be of benefit in helping insure patient compliance with the drug regime. On graduation, pharmacists are licensed, either nationally or regionally to practice. Some of their practice specialization include academic pharmacist, drug information pharmacist, hospital pharmacist, industrial pharmacist, veterinary pharmacist, home health pharmacist and military pharmacist.

Standardized Dress Code for Pharmacists

It is common to see a pharmacist wearing a white coat and underneath the white coat, they generally wear typical dresses or clothings, such as trousers and button-down shirt with neck-tie (men) and gowns or blouse and skirt (women). Wang (2009) observed that just like in the medical profession, white coats have been branded as possible sources of infection. The reason here being that the white coats were not washed frequently. This writer suggested that white coats should be laundered frequently, pharmacists should wear them but clinical pharmacists who deal directly with clients/patients should not wear them. Nothing that whatever the pharmacists wear should be smart clothes with white coats as necessary.

Duties of a Pharmacist

WHO (2016) outlined the standardized duties of the pharmacists as follows:

- They supply medicines in accordance with a prescription or, when legally permitted;
- Sell medicines without prescription;
- Ensure accurate supply of appropriate products;
- Counseling of patients at the time of dispensing of prescription and non-prescription drugs;
- Give drug information to health professionals, patients and the general public;
- Participate in health promotion programmes; and
- Maintain links with other health professionals.

The main activities of pharmacists are as follows:

- **Processing of Prescription:** The pharmacist verifies the legality, safety and appropriateness of the prescription order, checks the patient's medication record before dispensing the prescription, ensures that the quantities of medication are dispensed accurately and decides whether the medication should be handed to the patient;
- **Care of patients or clinical pharmacy:** The pharmacist seeks to collect and integrate information about the patient's drug history, clarifies the patient's understanding of

the intended dosage regimen and method of administration, advises the patient of drug-related precautions, monitors and evaluates the therapeutic response;

- **Monitoring of drug utilization:** Participates in arrangement for monitoring the utilization of drugs, such as practice research projects and schemes to analyse prescriptions for the monitoring of adverse drug reactions;
- **Extemporaneous preparation and small-scale manufacture of medicines:** They continue to prepare medicines in the pharmacy, which enables them to adapt the formulation of a medicine to the needs of an individual patient, they engage in manufacture of medicines which must accord with good manufacturing and distribution practice guidelines;
- **Responding to symptoms of minor ailments:** They receive requests from members of the public for advice on a variety of symptoms and when indicated, refers the inquiries to a medical practitioner, but if the symptoms relate to self-limiting minor ailment, the pharmacist can supply a non-prescription medicine with the advice to consult a medical practitioner if the symptoms persist;
- **Informing healthcare professionals and the public:** They compile and maintain information on all medicines and particularly on newly introduced medicines, provide this information as necessary to the other healthcare professionals and patients;
- **Health promotion:** They take part in health promotion campaigns, locally and internationally, on a wide range of health-related topics and particularly on drug-related topics, they take part in education of local community groups and in campaigns such as immunization, malaria and blindness programmes;
- **Domiciliary services:** They provide an advisory as well as a supply service to residential homes for the elderly and other long-term patients; and
- **Agricultural and veterinary practice:** They supply animal medicines and medicated animal feeds (WHO, 2016).

Benefit of Standardization of Healthcare Professionals

- Standardization of healthcare professionals gives room for uniformity of each group in the healthcare sector;
- It allows for proper identification of the group each individual belong;
- It allows for continuity in service wherever a health professional finds his or herself;
- It allows for uniformity in clients/patient's care and enhances patient's care;
- It encourages good behaviour, discipline and respect in the healthcare sector;

Others are:

- Provides policy and decision makers and healthcare workers a means for comparing outcomes resulting from standardized process implementation within or among healthcare organizations;
- Healthcare workers are able to relate to one another in a meaningful way;
- Allows health workers to learn from each other's experiences; and
- Enhance ability to analyse risk (Davies and Tales, 2005; Reiling, Hughes and Murphy, 2008).

Conclusion

Standardization refers to the creation and use of developed guidelines for the production of uniformity in a group or organization. Standardization of healthcare professionals enhances groups in the healthcare sector and standardization allows for uniformity in each of these

professional groups to the extent that there is continuity in service anywhere a health professional finds his or herself.

Recommendation

The following recommendations were made:

- Healthcare professionals should adhere strictly to the standardized norms and rules of their respective professional groups for effective healthcare delivery.
- Administrators of each healthcare professional group should formulate standardized rules for their respective groups, where these are lacking for proper uniformity.

REFERENCES

- Anarado, A. N. (2002). *Ethics and laws in nursing practice*, Enugu: snaap press.
- Beaumont Health. (2015). *What type of doctors are you looking for?* Michigan: Beaumont health. <https://www.botsford.org>
- Crosta, P. M. (2016). *What does a nurse do?* Brighton: medilexicon international limited.
- Davies, M. and Tales, H. (2005). Enhancing patient safety through a standardized model of physiologic monitoring. *Health Quarterly*, 8(1), 49 – 52.
- Department of Health and Human Services. (2013). *Nurses and midwives dress code guideline*. Tasmania: author. www.utas.edu.au.
- Eve, I. (2010). *Polytex technologies implements multiple automated medical textile management system in hospitals and healthcare*. Beijing: Politech technologies.
- Human Resource Development Centre. (2001). *A situational analysis of human resources in the pharmacy profession in Canada*. Canada: Human Resource Development Centre.
- Ikinwot, C. T. (2013, May). *Ethical issues in nursing and the law*. Lecture presentation at the seminar for written examination, Utyo.
- Nigerian Medical Association. (2016). *Aims and objectives of Nigerian Medical Association*. Abuja: NMA.
- Nursing and Midwifery Council of Nigeria (2016). *Code of profession conduct: standards/code of professional conduct*. Gwarinpa: NMCN. Available at: www.nmcn.gov.ng/codec.
- Nurse Info. (2007). *What is a nurse?* Murseinfo.com.au
- Nursing World Nigeria. (2013). *About professional attire for nurses*. Available at: www.nursingworldnigeria.com
- Oxtoby, K. (2015). *Scrubs, suit or jean: what should doctors wear to work?* London: BMJ publishing group limited, careers.bmj.com
- Reiling, J., Hughes, R. G., and Murphy, M, R (2008). The impact of facility design on patient safety. *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*. Rockville: Agency for Healthcare Research and Quality.
- SOKANU. (2015). *What does a doctor do?* Vancouver: SOKANU. Available at: <https://www.sokanu.com>.
- Stephen, J., Swensen, M. D. and Gregg, S. (2010). Cottage industry to post industry: the revolution in healthcare delivery. *New England Journal of Medicine*, 12, 362 -366.
- Study.com^A (2016). *Doctor of Medicine: Steps to become a medical doctor*. Study.com/articles
- Study.com^B, (2016). *Medical doctor: job prescription and career info*. Study.com articles.

- Timmermans, S., and Epstein, S. (2010). A world of standards but not a standard world: towards a sociology of standards and standardization. *Annual Review of Sociology*, 36, 69-89.
- Wang, L. N. (2009). What should pharmacists wear? *The pharmaceutical Journal*. Jobs.pharmaceutical-ournal.com
- WHO. (2007). *Healthcare professionals and their roles in achieving MDGS 4 and 5: multi-country workshops*. Geneva: WHO.
- WHO. (2016). *The role of the pharmacist in the healthcare system*. Geneva: WHO.
- Wikipedia, (2016). *Health professional*. Available at: <https://en:m.wikipedia.org>.
- Windel, L. (2008). An evidence-based approach to creating a new nursing dress code. *Journal of American Nurses Association* 3(1).
- Woodcock, E. W. (2010). *Tips to evaluate your medical practice's dress code policy*. Washington D.C: medical group management association. www.mgma.com.

[/csr/don/16-january-2020-novel-coronavirus-japan-ex-china/en](#)