

USE OF ABBREVIATIONS IN MEDICAL RECORDS IN A UNIVERSITY HOSPITAL

Thesis

Submitted for partial fulfillment of Master Degree (M.Sc.)
in Epidemiology

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

" قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ "

صدق الله العظيم

(البقرة - الآية ٣٢)

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LIST OF ABBREVIATIONS

@.....	at
ALS.....	amyotrophic lateral sclerosis
ASHP.....	American society of health-system pharmacists
ASHP.....	Health-System Pharmacists
Ca.....	calcium
COPD.....	chronic obstructive pulmonary disease
e-mail.....	electronic mailing
ENT.....	ear, nose and throat
FDA.....	Food and Drug Administration
HRT.....	hormone replacement therapy
IBM.....	International Business Machines
ISMP.....	institute for safe medication practices
ISMP.....	Institute for Safe Medication Practices
JC.....	Joint Commission on Accreditation of Healthcare Organizations
JCAHO.....	Joint Commission on Accreditation of Health Organizations
LASER.....	Light Amplification by Stimulated Emission of Radiation
MAR.....	medication administration record
MARs.....	medication administration records
MD.....	Doctor of Medicine
modem.....	modulator–demodulator
MRI.....	magnetic resonance imaging
NCCMERP.....	National Coordinating Council for Medication Errors Reporting and Prevention
q.e.d.....	quod erat demonstrandum
RADAR.....	Radio Detecting and Ranging
SARS.....	severe acute respiratory syndrome
SCBU.....	Special Care Baby Unit
U.S.....	United States
U.S.A.....	United States of America
USP.....	United States Pharmacopeia
WWW.....	World Wide Web

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INTRODUCTION

The term abbreviation is derived from the Latin *brevis*, or short. More specifically, it is a letter or a group of letters used to represent an entire word (**Kuhn, 2007**).

Medical abbreviations serve as a universal language to provide specific information and/or orders in a shortened format (**Jones, 2007**).

The use of abbreviations is very common throughout the medical world as a means of saving time and space whilst writing in the medical records. These abbreviations are usually not taught as a part of core curriculum in medical or nursing courses. Residents and trainee specialists learn them in the course of their day-to-day clinical work. With the development of specialities, each has produced a collection of commonly used abbreviations within its practice (**Parvaiz et al., 2008**).

Optimal communication between health care providers, frequently through their notes, is essential for supplying high quality care within and across clinical settings (**Walsh and Gurwitz, 2008**).

Regardless of their convenience, medical abbreviations have been responsible for serious errors and deaths. According to the Institute for Safe Medication Practices (ISMP) over 7,000 deaths per year may be attributed to medication errors. The use of abbreviation and medical notation makes a significant contribution to this statistic (**Kuhn, 2007**).

Look-alike abbreviations, throughout the healthcare literature are widespread examples of common errors due to look-alike abbreviations or symbols. These problems involve numbers as well as letters. The closer the symbols appear the more chance for error. In using

abbreviations there are fewer clues to the intended meaning of the word (**Kuhn, 2007**).

In 1996 Joint Commission on Accreditation of Healthcare Organizations (JCAHO) began to gather information on “sentinel events,” defined as “unexpected occurrence(s) involving death or serious physical or psychological injury, or risk thereof”—such as patient suicide, “wrong-site surgery,” and treatment delays—and called “sentinel” because such occurrences can be seen as indicators of the quality of the care. One category of errors that stood out to JCAHO’s Sentinel Event Advisory Group was the misinterpretation of commonly used abbreviations (**Karch et al., 2004**).

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has established a safety goal for 2004 related to the use of dangerous abbreviations, acronyms, and symbols. Abbreviations contribute to medical errors when clinicians misinterpret a letter or symbol and, because of this misinterpretation, administer a wrong medication or dose or give medication at the wrong time or with the wrong frequency. The Joint Commission recommends that facilities limit their use of certain abbreviations and has required facilities to stop using five specific sets of abbreviations as of Jan 1, 2004 (**Beyea, 2004**).

On November 23rd, 2004, JCAHO hosted the National Summit on Medical Abbreviations. In all 50 professional societies and associations and interest groups participated, discussing medical errors related to the misuse and misinterpretation of abbreviations, acronyms, and symbols (**Cohen, 1999**).

The Institute for safe Medication Practices (ISMP) in 2005 published a list of error-prone abbreviations. It encompasses the Joint Commission list, but is far more extensive (**Kuhn, 2007**).

In June 2006, The U.S.A Food and Drug Administration (FDA) and ISMP launched a nationwide education campaign to reduce the use of unclear abbreviations, symbols, and dose expressions. The aim is to eliminate the use of potentially confusing abbreviations by healthcare professionals, medical students, medical writers, the pharmaceutical industry and FDA staff (**Cohen, 1999**).

The Safe Practices Steering Committee of the National Quality Forum (NQF) also recommends avoiding abbreviations and dose expressions deemed to be dangerous (**Helen, 2008**).

In Egypt, use of abbreviations in medical records has not been studied before. It is noticed that not only English abbreviations are used but also Arabic abbreviations. What are the common abbreviations in use in Egypt? And how does the staff comprehend it? The answer of these two questions will help the quality professionals to control the use of abbreviations in medical records in Egypt and improve patient safety.

AIM OF THE STUDY

To improve effectiveness of communication among health care givers and reduce communications errors.

OBJECTIVES

- 1- To identify used abbreviations in medical records in general and specialized surgical departments in Eldemerdash hospital.
- 2- To assess comprehension level of abbreviations written in medical records by medical and paramedical staff of general and specialized surgical departments in Eldemerdash hospital.

METHODOLOGY

An abbreviation was defined as any shortened form of a word, for example “obs” (observation); any acronym, for example “SALT” (speech and language therapy); any contracture, for example “S bifida” (Spina bifida), and any initialism, for example “NGT” (nasogastric tube).

- 1- **Study Design:** A descriptive study design will be applied.
- 2- **Study setting:** Eldemerdash hospital .
- 3- **Sampling:**

I. Medical records:

- The medical records of the patients admitted to the general and special surgery departments in Eldemerdash hospital during a period of 6 months from January to June 2010 were found to be 17512.