

**TRAINING MATERIALS FOR  
EFFECTIVE MEDICATION  
INSTRUCTION DELIVERY TO  
DEAF AND HARD-OF HEARING PATIENTS  
(GUIDEBOOK & VIDEO)**



**HAZEL ANNE LAMADRID-CATUBLAS**

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Training Materials for Effective Medication Instruction Delivery to Deaf and Hard-of-Hearing patients (Guidebook & Video)

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# LEARNING THE BASICS OF DEAF COMMUNICATION

## Communication Barriers between Pharmacist and Deaf Patients

It is a vital task for pharmacists to provide proper counseling to patients whenever medication is dispensed. Relaying medication related instructions is challenging because of the different barriers of communication. It is therefore important for pharmacists to recognize these barriers so that he/she can utilize various methods of delivering the instructions to patients. Barriers to communication can be *personal or pharmacist-centered, patient-centered, and environmental* (Ellis & Sherman, 2013).

**1. Pharmacist-centered barrier.** Include poor body positioning and distracting body movements. This might lead a patient to feel that the pharmacist is not being attentive. To resolve this, pharmacist should stay within 1 and 1/2 to 4 feet from the patient who is being counseled. Not too far nor too close to invade "personal space" of the patient. Any movement that can send an antagonistic message to the patient such as folding arms across the chest or tapping a foot should also be avoided.

**2. Patient-centered barrier.** Include age, language, and literacy level of patients. Special means of providing counseling to patients with visual, hearing, and other physical challenges should also be considered.

**3. Environmental barrier.** The ergonomic design of the patient counseling area can be a source of an environmental barrier. The counseling area requires regular

reappraisal in order to determine whether it is meeting the needs of patients. Accessibility, proximity to the crowded area, and privacy concerns should be considered in assigning space dedicated for patient counseling services.

Providing medication related instructions to patients with profound hearing loss is even more challenging considering the above mentioned barriers. In the case of deaf and hard-of-hearing patients wherein spoken words are very hard to discern, healthcare providers' must have the ability to utilize various tools to mitigate the identified communication barriers in giving medication instructions.

### **Patient Counseling Services Provided by Pharmacists**

Originally, patient counseling standards were set in the Omnibus Budget Reconciliation Act of 1990 (OBRA 1990) and the Indian Health Service Model. A law that mandates pharmacists to offer patient counseling on their prescription medications. Different states have adopted the rules and made the counseling applicable to all other patients not only on prescribed medications but also to over-the-counter (OTC) drugs as well.

If the patient agreed to be counselled on the medications being dispensed, the pharmacist discuss the following information and other related instructions:

1. name of medication
2. intended use and expected action
3. route of administration, dosage form, and dosage
4. administration schedule
5. proper storage
6. common adverse effects that may be encountered

7. techniques for self-monitoring and drug therapy
8. prescription refill information

The above mentioned information are generally provided by the pharmacist in a one-way, provider-centered manner. The entire process is time consuming both for the patient and pharmacist. One way to mitigate the concern in the length of time spent per patient requiring counseling is to determine the patient's baseline understanding on the medication. These are the information that the patient already knows about the medication. The Indian Health Service Model recommends "three prime questions" to streamline the process:

1. What did your prescriber tell you this medication is for?
2. How did your prescriber tell you to take the medication?
3. What did your prescriber tell you to expect?

These questions can stimulate discussion regarding the purpose of the medication, directions for use, all aspects of dosing and administering, and the desired outcomes of the therapy. The pharmacist can then supplement the information required by the patient to attain thorough understanding of the drug being dispensed.

## Communicating Drug Related Information to Deaf and HOH Patients

There are various methods that healthcare providers can employ to deliver important medication related instructions to Deaf and Hard-of-hearing patients. Very often, healthcare providers rely on the hearing companions of Deaf patients like family members or volunteers from Deaf Organizations serving as the interpreter during the counseling sessions. However, there are instances particularly on adult Deaf and HOH patients wherein they are not accompanied by a hearing family member or an interpreter. Healthcare provider is then compelled by his/her responsibility to deliver correct information despite being faced with different barriers of communication.

Deaf people communicate with hearing people in different ways. Several factors might influence their preferred means of communicating such as the type and level of deafness, language skills, educational level, speech abilities, and even personality. Some Deaf use combination of speechreading and sign language. While others depend on writing, finger spelling, body language and facial expressions. Healthcare providers can also utilize combination of these techniques in conveying information to Deaf patients. Patient counseling is usually being done in a one-to-one situation.

Here are some of the tips introduced by Rochester National Technical Institute for the Deaf, (2012) when communicating with Deaf person in one-to-one situation:

1. **Get the Deaf person's attention.** There are several ways to do this. A gentle tap on the shoulder can get the attention. If beyond reach, a wave

in the air until eye contact is established. Switching lights on and off can also catch attention.

2. **Key the Deaf person into the topic of discussion.** They must be made aware of the subject matter to be discussed in order to pick up words that can help them follow the conversation. This is particularly important for Deaf people who do speechreading.
3. **Speak slowly and clearly, do not shout, exaggerate, or over pronounce.** Exaggeration can distort lip movements making speech reading more difficult. Try to enunciate each word without force or tension. Simpler words in shorter sentences are easier to understand than long and ambiguous ones.
4. **Look directly at the deaf person when speaking.** Avoid turning away from the receiver or doing other things like operating computers, gadgets, or pulling a file while speaking. This can distract the person trying to understand the message being conveyed. Maintain eye contact with the deaf person. It conveys the feeling of direct communication. Even with the presence of an interpreter, continue to speak directly to the deaf person. He/she will turn to the interpreter as needed.
5. **Repeat, then try to rephrase a thought if there is a problem being understood rather than repeating the same words again.** Don't hesitate to communicate by writing if necessary because there are some lip movements combinations that are difficult to speechread. Getting the message across is more important than the medium used.

6. **Use appropriate non verbal cues such as postural, gestural, and facial expression to supplement communication.** Gestures can perform many functions in communication such as regulating the flow and rhythm of interaction, maintains attention, add emphasis, and characterize content. A lively speaker always is more interesting to watch.
7. **Use open-ended questions that must be answered by more than 'yes' or 'no.'** Refrain from assuming that Deaf person have understood the message entirely because he/she nodded. Ensure that accurate information has been conveyed by getting a coherent response to an open-ended question.

#### **Other Tips in Communicating with Deaf People**

Below are more tips for communicating with persons who are Deaf or Hard of Hearing (Sheetz, 2004).

1. Ask the Deaf or HOH person what will be of help in the communication process.
2. Select a quite environment for communicating exchanges.
3. Remain within 3 to 5 feet from the person.
4. When using visual aids, give the person the time to look at the aid before attempting to speech read.
5. If more than one person is engaged in the conversation, identify or make reference of who is about to speak before he/she begins. Make sure that only one person at a time talks.
6. Do not be afraid to incorporate gestures and employ natural facial expressions.

7. If you know some basic signs, do not be afraid to use them.
8. Continue to sign even if a hearing person comes up. Do not leave the Deaf person out of the conversation.
9. When using an interpreter, speak directly to the Deaf person; the interpreter will respond in the first person.
10. Rely on writing if you reach a communication impasse.

## COMMUNICATION MODALITIES

Here are some of the ways in which important information can be communicated to Deaf and Hard-of-hearing patients.

- ❖ **Sign Language.** Sign languages have been demonstrated to be true languages at par with spoken languages. While spoken languages are based on classes of sound, sign languages are built from visual units (Martinez, 2012). It has no written system and are purely driven by grammatical devices in the nonmanual signals of face and body. In the Philippines, with the recent Senate approval of the 3rd and final reading of House Bill (HB) 7503 under Senate Bill No. 145, Filipino Sign Language (FSL) becomes official medium of instruction and communication to be used in all government transactions for the deaf community.
- ❖ **Fingerspelling.** Also known as dactylology is the representation of the letters of a writing system, and sometimes numeral systems, using only the hands. There are different handshapes representing each letter in the alphabet. In fingerspelling, letters are formed one after another to spell out words. (Refer to the instructional video for the handshapes for specific letters and numbers). Fingerspelling can be comprehended visually or tactually. Tracing the shape of letters in the air like the shape of letter Z is the simplest visual form of fingerspelling. There are also various types of fingerspelling. The one-handed such as the American Sign Language (ASL) and the Irish Sign Language, or it can be a two-handed such as in British Sign Language

- ❖ **Oral communication.** This is done through speaking, listening, and speechreading, without the use of sign language. Again in using this technique, several factors must be considered that might influence the comprehension of Deaf person with the spoken messages.
- ❖ **Simultaneous communication.** A mode of communication employing sign language and spoken words simultaneously.
- ❖ **Total communication.** Communication through any and all means that were mentioned. Include but not limited to speechreading or lipreading, sign language, fingerspelling, pantomime, postural and gestural communication, visual cards, and writing.

## INFOGRAPHICS IN PATIENT COUNSELING

An infographic (short for information graphic) is a type of picture that blends data with design, helping individuals communicate messages to their audience. A more formal definition of infographics states as "*a visualization of data or ideas that tries to convey complex information to an audience in a manner that can be quickly consumed and easily understood*". The process of developing and publishing infographics is called data visualization, information design, or information architecture (Smiciklas, 2012).

In this manual, data visualization was done (Appendix A-F) on some of the common information and instructions being delivered to patient whenever certain medication is dispensed. These infographics were developed in collaboration with a Deaf graphic artist. It includes dosage formulations, timing and frequency of administration, and common side effects associated with the use of drugs. The infographics were developed to assist the pharmacists and other healthcare provider in relaying basic information to Deaf and HOH patients particularly when sign language and other modes of communication are limited. Moreover, the Filipino sign language of many medical terminologies are still in the process of development. Thus, limiting the existing signs to be executed in communicating with the use of sign language. The images included in this guidebook were developed with the help of consultants from various Deaf organizations and a Deaf graphic artist.

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## **APPENDICES**

# DOSAGE FORMS OF DRUGS

HARD  
GELATINE



SOFT  
GELATINE



**CAPSULE**



**CREAM & OINTMENT**



**PARENTERAL /  
DRUGS TO BE INJECTED**



**POWDERS & GRANULE**



**NASAL SPRAY**



**MOUTH SPRAY**



**SUPPOSITORIES**



**SYRUP**

# TIMING & FREQUENCY OF DRUG ADMINISTRATION



MORNING



AFTERNOON



EVENING



MORNING & EVENING



EVERY 4 HOURS



EVERY 8 HOURS



OR



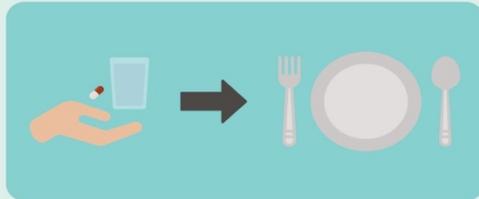
EVERY 12 HOURS



OR



## TIMING & FREQUENCY OF DRUG ADMINISTRATION



BEFORE MEAL



AFTER MEAL



BETWEEN MEALS



AT BED TIME



AROUND THE CLOCK



ONCE A DAY (OD)



TWICE DAILY (BD)



THREE TIMES DAILY (TDS)



FOUR TIMES DAILY (QDS)

# TIMING & FREQUENCY OF DRUG ADMINISTRATION



EVERY MONDAY



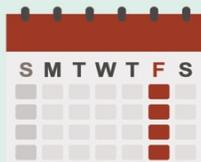
EVERY TUESDAY



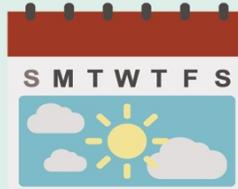
EVERY WEDNESDAY



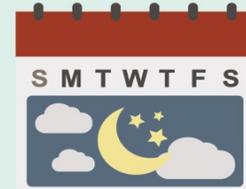
EVERY THURSDAY



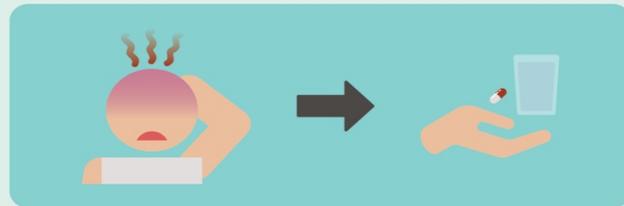
EVERY FRIDAY



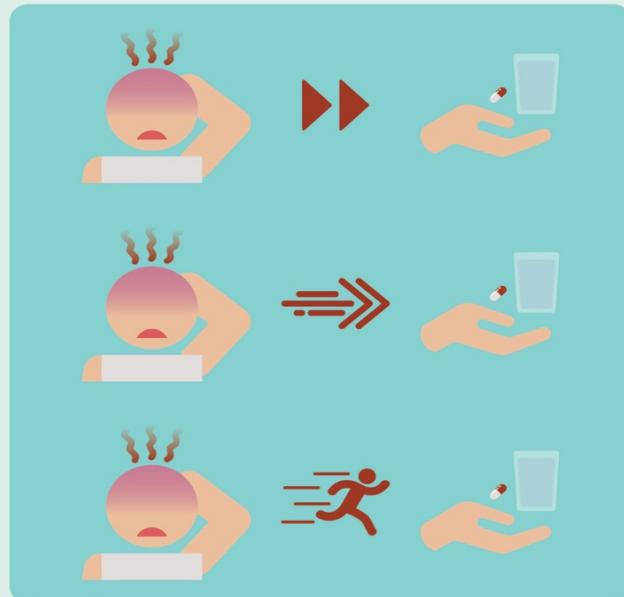
EVERY MORNING (OM)



EVERY EVENING (ON)

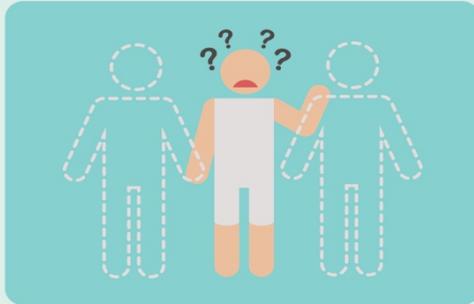


AS NEEDED (PRN)



IMMEDIATELY (STAT)

# LIST OF SIDE EFFECTS ASSOCIATED WITH DRUGS



HALLUCINATION



HEADACHE



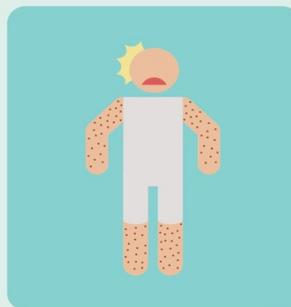
NAUSEA AND VOMITING



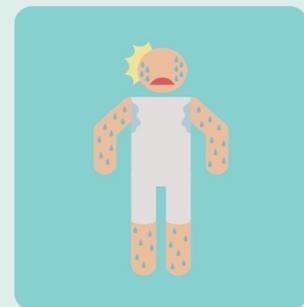
NEPHROTOXIC / TOXIC EFFECT ON THE KIDNEY



OTOTOXIC / TOXIC EFFECT ON THE EAR



RASHES



SWEATING

## LIST OF SIDE EFFECTS ASSOCIATED WITH DRUGS



**BLEEDING**



**BLURRED VISION**



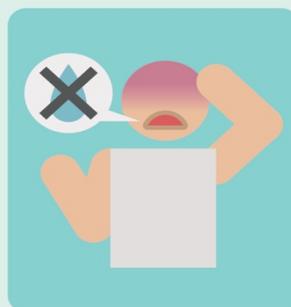
**CONSTIPATION**



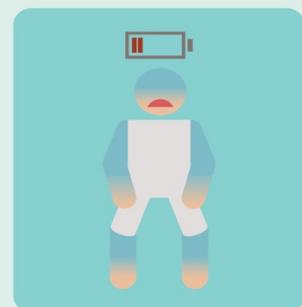
**DIARRHEA**



**DIZZINESS**



**DRY MOUTH**



**FATIGUE**

## APPENDIX G

### ABBREVIATION AND ACRONYMS USED IN PRESCRIPTIONS SIGNA/PATIENT INSTRUCTIONS

ABBREVIATION (LATIN ORIGIN)	MEANING
a.c (ante cinos)	before meals
ad lib (ad libitum)	at pleasure, freely
admin	administer
A.M. (ante meridiem)	morning
aq. (aqua)	water
ATC	around the clock
b.i.d (bis in die)	twice a day
c or (cum)	with
d (die)	day
et	and
h. ot hr. (hora)	hour
h.s. (hora somni)	at bedtime
i.c. (inter cibos)	between meals
min (minutum)	minute
m&n	morning and night
N&V	nausea and vomiting
noct. (nocte)	night
NPO (non per os)	nothing by mouth
p.c. (pos cibos)	after meals
P.M. (post meridiem)	afternoon; evening
p.o. (per os)	by mouth (orally)
p.r.n. (pro re nata)	as needed
q (quaque)	every
qAM	every morning
qah, q&h, etc	every ___ hours
q.i.d (quater in die)	four times a day
rep. (repetatur)	repeat
s (sine)	without
s.i.d. (semel in die)	once a day
s.o.s. (si opus sit)	if there is need, as needed
stat (stamin)	immediately
t.i.d. (ter in die)	three times a day
ut dict. (ut dictum)	as directed
wk.	week