



Policy and Procedure of Look-alike &
Sound-alike Medications

AMRHPHARM/P&P/007/Vers.02
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| Institution Name: Al Masarra Hospital | | | | | |
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| Approval Process | | | | | |
| | Name | Title | Institution | Date | Signature |
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Acronyms:

| | |
|-------------|---|
| DGMS | Directorate General of Medical Supplies |
| MoH | Ministry of Health |
| LASA | Look-alike Sound-alike |
| FDA | Food and Drug Administration |
| CPOE | Computerized Prescriber Order Entry |
| HIS | Hospital Information System |



Policy and Procedure of Look-alike Sound-alike (LASA) Medications

1. Introduction

Look-alike Sound-alike (LASA) medications involve medications that are visually similar in physical appearance or packaging and names of medications that have spelling similarities and/or similar phonetics. Confusing drug names is a common system failure that may lead to potentially harmful medications. Confusing drugs with similar names accounts for about 10 percent of all medication errors, according to the FDA. Job stress, unfamiliarity with drug names and confusing, unclear orders, among other things – creates ample opportunity for confusion, throughout the medication process, from ordering to administration.

Common Risk Factors associated with LASA medications include:

- Illegible handwriting
- Incomplete knowledge of drug names.
- Newly available products.
- Similar packaging or labeling.
- Similar strengths, dosage forms or frequency of administration.
- Similar clinical use.

Healthcare institutions need to institute risk management strategies to minimize adverse events with LASA medications and enhance patient safety. Al Masarra Hospital, Pharmacy department developed this document to keep up an excellence and establish standards for improving the overall patient health outcomes and prevent the chances of medication errors due to the similarities of different medications especially in the field of psychiatric care management.



2. Scope

This document is applicable to all healthcare providers dealing and handling medications (Physicians/Doctors, Pharmacy professionals and Staff Nurses) in Al Masarra Hospital (AMRH).

3. Purpose

- 3.1 To provide a multidisciplinary policy and procedure on handling Look-alike Sound-alike medications.
- 3.2 To prevent potentially harmful medication errors that may result from confusing look-alike sound-alike medication names, and similar packaging.

4. Definitions

- 4.1 Look-alike Sound-alike medications (LASA): are medications which are visually similar in physical appearance, packaging and with generic or brand names that have spelling similarities and / or similar phonetics.
- 4.2 Triangle check: is to check actual medicines against the medicines' labels and against the prescription.

5. Policy

- 5.1 Pharmacy & Medical Stores Department in the Health Units must keep an up-to-date list of LASA medications available in stock and should be posted in each designated patient care area for staff awareness.
- 5.2 LASA medications must be identified in the storage areas including Pharmacy, Nursing Units, and Crash Cart/Trolley and in any other areas where medication is stored and should be physically segregated from their LASA pair.
- 5.3 Medications identified as LASA must be affixed with LASA warning "Yellow Label" in storage location and medications storage bins.
- 5.4 Double checking must be carried out during prescribing, dispensing and administration processes.
- 5.5 Tallman lettering should be implemented for FDA Recommended Tall Man letter list of Look Alike Drug names that is approved in MOH with in labeling and supported by the Health Information System (HIS) as additional safe guards to avoid errors with LASA medications).



- 5.6 All staff should report errors and potentially hazardous conditions with LASA medication names to DGMS through Drug Quality Reporting Program. These reports will be reviewed and utilized for potential addition to LASA medication list and its related error prevention strategy.

6. Procedure

6.1 Procedures and Strategies

The below-mentioned procedures and strategies should be considered to avoid errors with Look-Alike and Sound-Alike Medications which may occur during any of the following processes:

6.1.1 Procurement:

- 6.1.1.1 Minimize the availability of multiple medicines strengths.
- 6.1.1.2 Whenever possible, avoid purchase of medicines with similar packaging and appearance.
- 6.1.1.3 As new products or packages are introduced, compare them with the existing packaging.

6.1.2 Storage:

- 6.1.2.1 Use Tall Man lettering to emphasize differences in medications with sound-alike names. Tall Man lettering (or Tall man lettering) is the practice of writing part of a medicines name in upper case letters to help distinguish sound-alike/look-alike medications from one another to avoid medication errors. Examples of Tall Man lettering are **DOBUTamine** and **DOPamine**. (See Appendix 1. Examples of Tall Man Lettering)
- 6.1.2.2 Use additional warning labels for look-alike medicines. Warning labels should be uniform throughout the respective facility to facilitate identification (Yellow color labels).



6.1.2.3 Place LASA medications in locations separate from each other or in non-alphabetical order.

6.1.3 Prescribing:

6.1.3.1 Prescription should specify clearly the generic name of medication, dosage form, dose and complete direction for use.

6.1.3.2 Write the diagnosis or medication's indication for use. This information helps to differentiate possible choices in illegible orders.

6.1.3.3 Whenever possible, drug names in Computerized Prescriber Order Entry (CPOE) should incorporate Tall Man lettering.

6.1.3.4 Communicate clearly. Take your time in pronouncing the drug name whenever an oral order has to be made. Ask that the recipient of the oral communication to repeat the medication name and dose. However, such verbal and telephonic orders should be avoided, except in emergency situation.

6.1.3.5 Avoid or minimize the use of Verbal and Telephonic orders.

6.1.4 Dispensing /Supply:

6.1.4.1 Identify medicines based on its name and strength and not by its appearance or location.

6.1.4.2 Check the purpose of the medication and the dose for the medicines dispensed.

6.1.4.3 Read medication labels carefully at all dispensing stages and perform triangle check. Triangle check is to check actual medicines against the medicines' labels and against the prescription.

6.1.4.4 Double checking should be conducted during the dispensing and supply process.

6.1.4.5 Highlight changes in medication appearances to patients upon dispensing.

6.1.4.6 Ensure the availability of LASA warning sticker before dispensing.



6.1.4.7 Highlight/communicate clearly changes in medication appearances topatients upon dispensing.

6.1.5 Administration:

6.1.5.1 Read carefully the label each time a medication is accessed, and/or priorto administration.

6.1.5.2 Check the purpose of the medication and the dose prior to administration.

6.1.5.3 Double checking should be conducted before administration.

6.1.6 Monitoring:

6.1.6.1 Monitor new drugs added to the hospital formulary as they are releasedand provide guidelines to these new drugs.

6.1.6.2 A monthly inspection will be conducted by the Pharmacy Staff to assesscompliance with the safe storage of LASA medications.

6.1.6.3 Monitor patients who may have received wrong medications, as a resultof LASA medication error, if any.

6.1.7 Information:

6.1.7.1 Update healthcare professionals of changes on the list of LASA andconfusing drug names.

6.1.7.2 Provide education on LASA medications to healthcare professionals atorientation and as part of continuing education.

6.1.8 Patient Education:

6.1.8.1 Inform patients on changes in medication appearances.

6.1.8.2 Educate patients and their caregivers to alert healthcare providers whenever a medication appears to vary from what is usually taken or administered.

6.1.8.3 Encourage patients and their caregivers to learn the names of their medication.



7. Responsibility

7.1 Physicians/Doctors Shall:

- 7.1.1 Write legibly, incorporate Tall Man lettering for drug names in Computerized Prescriber Order Entry (CPOE), and communicate clearly with the staff.
- 7.1.2 Use the remarks column in the computerized entry of prescriptions and mention clearly any specific instruction for any medications.

7.2 Pharmacists Shall:

- 7.2.1 Use warning labels for look-alike/sound-alike medications which should be uniform throughout the respective facility to facilitate identification.
- 7.2.2 Avoid mix-ups of medications and arrange systematically.
- 7.2.3 Communicate with the end users regarding any change in labels/color/strength etc. of any medication it can be confused/misunderstand.

7.3 Staff Nurses Shall:

- 7.3.1 Read the label carefully each time a medication is accessed and prior to administration.
- 7.3.2 Check the appropriateness of the medication and the dose prior to administration.
- 7.3.3 Report to the pharmacy any potential confusion or discrepancies.



8. Document History and Version Control Table

| Document History and Version Control | | | |
|---|---------------------------------|----------------------------------|--------------------|
| Version | Description of Amendment | Author | Review Date |
| 1 | Initial Release | Policy and Procedure team (P&MS) | May 2021 |
| 2 | Update and Review | Policy and Procedure team (P&MS) | July 2025 |
| Written by | Reviewed by | Approved by | |
| Policy and Procedure team (P&MS) | Najla Al Zadjali | Dr. Bader Al Habsi | |

9. Related Documents

- 9.1 Policy and Procedure of Medications Storage - Al Masarra Hospital.
- 9.2 Policy and Procedure of Preparation and Dispensing of Medications - Al Masarra Hospital
- 9.3 Policy and Procedure of Medication Error Reporting - Al Masarra Hospital.



10. References

| Title of book/journal/articles/Website | Author | Year of publication | Pages |
|---|--|----------------------------|--------------|
| Look-alike / Sound-alike Medications | DGMS | MOH-DGMS-PH-36 | |
| Handling Look-alike / Sound-alike Medications | General Pharmaceutical Care Administration, MoH, KSA | | |



Appendices

Appendix 1. Examples of Tall Man Lettering

| Sl. No | Drug Name | Tall Man |
|--------|----------------|----------------|
| 1 | Amlodipine | amLODIPine |
| 2 | Aripiprazole | ARIPiprazole |
| 3 | Buspirone | busPIRone |
| 4 | Carbamazepine | carBAMazepine |
| 5 | Chlorpromazine | chlorproMAZINE |
| 6 | Clomipramine | clomiPRAMINE |
| 7 | Clomiphene | clomiPHENE |
| 8 | Clonazepam | clonazePAM |
| 9 | Dobutamine | DOBUTamine |
| 10 | Dopamine | DOPamine |
| 11 | Ephedrine | ePHEDrine |
| 12 | Epinephrine | EPINEPHrine |
| 13 | Fentanyl | fentaNYL |
| 14 | Fluoxetine | FLUoxetine |
| 15 | Fluphenazine | fluPHENAZine |
| 16 | Glipizide | glipiZIDE |
| 17 | Hydralazine | hydrALIZINE |
| 18 | Hydroxyzine | hydrOXYzine |
| 19 | Lamotrigine | lamoTRIGine |
| 20 | Levitiracetam | leviTIRACetam |
| 21 | Metformin | metFORMIN |
| 22 | Metronidazole | MetroNIDAZOLE |
| 23 | Nifedipine | NIFEdipine |
| 24 | Olanzapine | OLANZapine |
| 25 | Paroxetine | PAROxetine |
| 26 | Prenisolone | prednisoLONE |
| 27 | Quetiapine | QUETiapine |
| 28 | Ranitidine | raNITidine |
| 29 | Risperidone | risperiDONE |
| 30 | Sitagliptin | sitaGLIPTin |
| 31 | Sumatriptan | SUMATriptan |
| 32 | Tramadol | traMADol |



Appendix 2. Examples of Sound-alike Drugs

| Drug Name | Confused with Name |
|---------------------|-----------------------|
| Aminophylline | Amitriptyline |
| Amloride | Amlodipine |
| Amitriptyline | Nortriptyline |
| Azithromycin | Erythromycin |
| Beclomethazone | Betamethazone |
| Carbamazepine | Carbimazole |
| Cefotaxime | Cefuroxime |
| Chloepromazine | Chlorpropamide |
| Clomipramine | Chlorpheniramine |
| Dopamine | Dobutamine |
| Epinephrine | Ephedrine |
| Fluoxetine | Fluvoxamine |
| Folic Acid | Folinic Acid |
| Gliclazide | Glipizide |
| Hydroxyzine | Hydralazine |
| Imipramine | Clomipramine |
| IsosorbideDinitrate | IsosorbideMononitrate |
| Lamivudine | Lamotrigine |
| Mebendazole | Metronidazole |
| Methylprednisolone | Methyldopa |
| Olanzapine | Olzalazine |
| Promethazine | Chlorpromazine |



Appendix 3. Audit Tool

Department

Date:

| S.N. | Audit Process | Description of Criteria | Yes | Partial | No | N/A | Comments |
|------|---|--|-----|---------|----|-----|----------|
| 1 | Observation Interview Document review | Does the institution have a policy about handling Look-alike / Sound-alike (LASA) medications? | | | | | |
| 2 | Interview | Is the staff aware about handling Look-alike / Sound-alike (LASA) medications? | | | | | |
| 3 | Observation Document review | Is the institution affixing “name alert” stickers to areas where Look-alike or Sound-alike products are stored? | | | | | |
| 4 | Observation Interview | Double checking in the distribution/administration process is employed. (Medication Administration/Dispensing/Issuing etc.) | | | | | |
| 5 | Observation Interview | The staff ensures whenever possible, determining the purpose of the medication before dispensing and or drug administration. | | | | | |
| 6 | Observation Interview | Is the Pharmacy/Nursing staff accepting Verbal or Telephonic orders often from the doctors? | | | | | |
| 7 | Observation Document review | Look-alike/Sound-alike product names appears on computer screen. | | | | | |



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| S.N. | Audit Process | Description of Criteria | Yes | Partial | No | N/A | Comments |
|------|---|--|-----|---------|----|-----|----------|
| 8 | Observation Document review | Pharmacy and Nursing unit shelf labels are different in color and are in Tall man lettering etc. | | | | | |
| 9 | Observation Interview | Are the doctors encouraging patients and direct caregivers to question/query pharmacists and Nursing staff about medications that are unfamiliar or look or sound different they expected? | | | | | |
| 10 | Observation Interview Document Review | Is there an evidence that the healthcare professionals are providing education/updating knowledge on LASA medications as part of continuing medical education? | | | | | |



Appendix 4. Document Request Form

| Document Request Form | | | |
|--|--|---|-----------|
| Section A: Completed by Document Requester | | | |
| 1. Requester Details | | | |
| Name | Najla Al Zadlaji | Date of Request | July 2022 |
| Institute | Al Masarra Hospital | Mobile | — |
| Department | QMPSD | Email | — |
| The Purpose of Request | | | |
| <input type="checkbox"/> Develop New Document | <input checked="" type="checkbox"/> Modification of Document | <input type="checkbox"/> Cancelling of Document | |
| 2. Document Information | | | |
| Document Title | Policy and Procedure of Look-alike & Sound-alike Medications | | |
| Document Code | AMRH/PHARM/P&P/007/Vers.02 | | |
| Section B: Completed by Document Controller | | | |
| <input checked="" type="checkbox"/> Approved | <input type="checkbox"/> Cancelled | <input type="checkbox"/> Forward To:..... | |
| Comment and Recommendation: | | | |
| Name | Kunooz Al Balushi | Date | July 2022 |
| Signature | | Stamp | |





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Appendix 5. Document Validation Checklist

| Document Validation Checklist | | | | | |
|--|---|---|----|-----|----------|
| Document Title: Policy and Procedure of Look-alike & Sound-alike Medications | | Document Code: AMRH/PHARM/P&P/007/Vers.02 | | | |
| No | Criteria | Meets the Criteria | | | Comments |
| | | Yes | No | N/A | |
| 1. | Approved format used | | | | |
| 1.1 | Clear title – Clear Applicability | ✓ | | | |
| 1.2 | Index number stated | ✓ | | | |
| 1.3 | Header/ Footer complete | ✓ | | | |
| 1.4 | Accurate page numbering | ✓ | | | |
| 1.5 | Involved departments contributed | ✓ | | | |
| 1.6 | Involved personnel signature /approval | ✓ | | | |
| 1.7 | Clear Stamp | ✓ | | | |
| 2. | Document Content | | | | |
| 2.1 | Clear purpose and scope | ✓ | | | |
| 2.2 | Clear definitions | ✓ | | | |
| 2.3 | Clear policy statements (if any) | ✓ | | | |
| 3. | Well defined procedures and steps | | | | |
| 3.1 | Procedures in orderly manner | ✓ | | | |
| 3.2 | Procedure define personnel to carry out step | ✓ | | | |
| 3.3 | Procedures define the use of relevant forms | ✓ | | | |
| 3.4 | Procedures to define flowchart | | ✓ | | |
| 3.5 | Responsibilities are clearly defined | ✓ | | | |
| 3.6 | Necessary forms and equipment are listed | ✓ | | | |
| 3.7 | Forms are numbered | ✓ | | | |
| 3.8 | References are clearly stated | ✓ | | | |
| 4. | General Criteria | | | | |
| 4.1 | Policy is adherent to MOH rules and regulations | ✓ | | | |
| 4.2 | Policy within hospital/department scope | ✓ | | | |
| 4.3 | Relevant policies are reviewed | ✓ | | | |
| 4.4 | Items numbering is well outlined | ✓ | | | |
| 4.5 | Used of approved font type and size | ✓ | | | |
| 4.6 | Language is clear, understood and well structured | ✓ | | | |
| Recommendations For implementation More revision To be cancelled | | | | | |
| Reviewed by: <u>Kunooz Al Balushi</u> | | Reviewed by: <u>Irwin S. Rio</u> | | | |

