



# Pharmacist-Led Medication Reconciliation Upon Discharge from the Orthopedic Surgery Department

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## Main Information

**Primary registry identifying number**

LBCTR2023125487

**Protocol number**

LAU.SOP.ER1.14/Sep/2022

**MOH registration number**

**Study registered at the country of origin**

Yes

**Study registered at the country of origin: Specify**

**Type of registration**

Retrospective

**Type of registration: Justify**

The clinical trial was submitted several times before its commencement, but the website was down.

**Date of registration in national regulatory agency**

14/09/2022

**Primary sponsor**

Lebanese American University

**Primary sponsor: Country of origin**

Lebanon

**Date of registration in primary registry**

19/03/2024

**Date of registration in national regulatory agency**

14/09/2022

**Public title**

Pharmacist-Led Medication Reconciliation Upon Discharge from the Orthopedic Surgery Department

**Acronym**

**Scientific title**

Pharmacist-Led Medication Reconciliation Upon Discharge from the Orthopedic Surgery Department: An Interventional Randomized Controlled Trial

**Acronym**

**Brief summary of the study: English**

Medication reconciliation is a formal process of comparing the medications a patient is taking with the newly prescribed medications to avoid potential problems or discrepancies. Medication reconciliation should be done at every transition of care. The current practice at Lebanese hospitals' orthopedic surgery departments does not involve pharmacy services. This study is an interventional, randomized, non-blinded, controlled trial conducted at the Lebanese American University Medical Center—Rizk Hospital. Participants were  $\geq 18$  years old and discharged from the orthopedic surgery unit with at least one discharge medication. Patients were randomized either to the intervention arm or to the control arm. In the intervention arm, a pharmacist is involved in the discharge process by completing medication reconciliation, providing patient counseling, and conducting telephone follow-up. However, in the control arm, they received the normal standard of care. All patients received a phone call from the primary investigator on day 30 post-discharge to record the endpoints. The primary outcome was to compare the number of unintended medication discrepancies. The secondary outcome consisted of the occurrence of adverse drug events, patient satisfaction, and a composite endpoint of unplanned physician contact, emergency room admission, and hospital readmission on day 30 post-discharge (and individual components of the composite endpoint).



**Brief summary of the study: Arabic**

التوفيق بين الأدوية هو عملية رسمية لمقارنة الأدوية التي يتناولها المريض مع الأدوية الموصوفة حديثاً لتجنب المشاكل أو التناقضات المحتملة. ينبغي إجراء التوفيق بين الأدوية في كل مرحلة انتقالية للرعاية. الممارسة الحالية في أقسام جراحة العظام في المستشفيات اللبنانية لا تشمل خدمات الصيدلة. نظراً لأن الصيدلة هم خبراء الدواء، فإننا نعتقد أن التعليم التفصيلي الذي يقدمه الصيدلة للمرضى يمكن أن يساعد في تحديد المزيد من الأخطاء الدوائية، وبالتالي منع الأحداث الدوائية الضارة.

الدراسة عبارة عن تجربة تدخلية عشوائية غير معماة، أجريت في المركز الطبي في الجامعة اللبنانية الأميركية - مستشفى رزق. كان عمر عاماً وخرجوا من وحدة جراحة العظام باستخدام دواء خروج واحد على الأقل. تم اختيار المرضى بشكل عشوائي إما إلى ذراع 18مشاركين <= التداخل حيث يشارك الصيدلي في عملية الخروج من خلال استكمال التوفيق الدوائي وتوفير استشارات المرضى والمتابعة الهاتفية أو ذراع التحكم حيث تلقوا المستوى الطبيعي من الرعاية.

يوماً، سنقوم بإحصاء عدد التناقضات غير المقصودة التي تم تحديدها في كل فرع ومقارنتها من حيث الأهمية. سنقوم أيضاً بإجراء نقطة 30وبعد بعد الخروج 30نهائية مركبة للاتصال غير المخطط له بالطبيب، والدخول إلى غرفة الطوارئ، وإعادة الدخول إلى المستشفى في اليوم بعد الخروج من المستشفى وسيتم حساب 30(والمكونات الفردية لنقطة النهاية المركبة). سيتم حساب حدوث الأحداث الدوائية الضارة في اليوم بعد الخروج من المستشفى 30رضى المريض في اليوم.

**Health conditions/problem studied: Specify**

Number of unintended medication discrepancies identified after patient discharge from the orthopedic department

**Interventions: Specify**

Involving a pharmacist in the discharge process from the orthopedic surgery department by performing medication reconciliation, patient counseling, and telephone follow-up in addition to the standard of care.

**Key inclusion and exclusion criteria: Inclusion criteria**

Subjects must meet all the inclusion criteria to participate in the study

- Informed Consent
- Adult ( $\geq 18$  years)
- Discharged from orthopedic surgery unit with  $\geq 1$  discharge medication

**Key inclusion and exclusion criteria: Gender**

Both

**Key inclusion and exclusion criteria: Specify gender**

**Key inclusion and exclusion criteria: Age minimum**

18

**Key inclusion and exclusion criteria: Age maximum**

95

**Key inclusion and exclusion criteria: Exclusion criteria**

Subjects meeting any of the exclusion criteria at baseline screening will be excluded

- Did not provide consent
- Previously enrolled in another study
- Being transferred to another hospital
- Being transferred to another unit within the hospital

**Type of study**

Interventional

**Type of intervention**

Quality improvement

**Type of intervention: Specify type**

N/A

**Trial scope**

Safety

**Trial scope: Specify scope**

N/A

**Study design: Allocation**

Randomized controlled trial

**Study design: Masking**

Open (masking not used)

**Study design: Control**

Active

**Study phase**

N/A

**Study design: Purpose**

Health services research

**Study design: Specify purpose**

N/A

**Study design: Assignment**

Parallel

**Study design: Specify assignment**

N/A

**IMP has market authorization**

**IMP has market authorization: Specify**





|   |  |                               |
|---|--|-------------------------------|
| <b>Name of IMP</b>                                  | <b>Year of authorization</b>                             | <b>Month of authorization</b> |
| <b>Type of IMP</b>                                  |  |                               |
| <b>Pharmaceutical class</b><br>n/a                  |  |                               |
| <b>Therapeutic indication</b><br>n/a                |  |                               |
| <b>Therapeutic benefit</b><br>n/a                   |  |                               |
| <b>Study model</b><br>N/A                           | <b>Study model: Explain model</b><br>N/A                 |                               |
| <b>Study model: Specify model</b><br>N/A            |  |                               |
| <b>Time perspective</b><br>N/A                      | <b>Time perspective: Explain time perspective</b><br>N/A |                               |
| <b>Time perspective: Specify perspective</b><br>N/A |  |                               |
| <b>Target follow-up duration</b>                    | <b>Target follow-up duration: Unit</b>                   |                               |
| <b>Number of groups/cohorts</b>                     |  |                               |
| <b>Biospecimen retention</b><br>None retained       | <b>Biospecimen description</b><br>n/a                    |                               |
| <b>Target sample size</b><br>200                    | <b>Actual enrollment target size</b><br>178              |                               |
| <b>Date of first enrollment: Type</b><br>Actual     | <b>Date of first enrollment: Date</b><br>19/10/2022      |                               |
| <b>Date of study closure: Type</b><br>Actual        | <b>Date of study closure: Date</b><br>30/04/2023         |                               |
| <b>Recruitment status</b>                           | <b>Recruitment status: Specify</b>                       |                               |



Complete

**Date of completion**

30/04/2023

**IPD sharing statement plan**

No

**IPD sharing statement description**

n/a

**Additional data URL**

**Admin comments**

**Trial status**

Approved

## Secondary Identifying Numbers

No Numbers

## Sources of Monetary or Material Support

No Sources

## Secondary Sponsors

No Sponsors

## Contact for Public/Scientific Queries

| Contact type | Contact full name | Address | Country | Telephone | Email                 | Affiliation                  |
|--------------|-------------------|---------|---------|-----------|-----------------------|------------------------------|
| Public       | Souad Diab        | Beirut  | Lebanon | 70336597  | souad.diab@lau.edu    | Lebanese American University |
| Scientific   | Elsy Ramia        | Beirut  | Lebanon | 03167962  | elsy.ramia@lau.edu.lb | Lebanese American University |



## Centers/Hospitals Involved in the Study

| Center/Hospital name               | Name of principles investigator | Principles investigator speciality | Ethical approval |
|------------------------------------|---------------------------------|------------------------------------|------------------|
| LAU Medical Center - Rizk Hospital | Souad Diab                      | Pharmacist                         | Approved         |

## Ethics Review

| Ethics approval obtained  | Approval date | Contact name | Contact email         | Contact phone |
|---|---------------|--------------|-----------------------|---------------|
| Lebanese American University- University Medical Center Rizk Hospital | 14/09/2022    | Elsy Ramia   | elsy.ramia@lau.edu.lb | 03167962      |

## Countries of Recruitment

| Name    |
|---------|
| Lebanon |

## Health Conditions or Problems Studied

| Condition   | Code                | Keyword                   |
|---|---------------------|---------------------------|
| Medication reconciliation upon discharge from the orthopedic department | 2-Propranol (T51.2) | Medication Reconciliation |

## Interventions

| Intervention  | Description   | Keyword  |
|---|---|--|
| Medication reconciliation and patient counseling before discharge | Incorporating pharmacists in the discharge process by completing medication reconciliation and providing patient counseling | Medication Reconciliation and Patient Counseling |
| Patient telephone follow up                                       | Pharmacist telephone follow-up of the patient 3 days post-discharge   | Follow-up  |

## Primary Outcomes

| Name   | Time Points           | Measure  |
|--|-----------------------|--|
| Unintended medication discrepancies identified | Day 30 post-discharge | Number of unintended medication discrepancies identified |



## Key Secondary Outcomes

| Name  | Time Points           | Measure   |
|---|-----------------------|---|
| unplanned physician contact, Emergency Room admission, hospital readmission | Day 30 post-discharge | Composite endpoint of unplanned physician contact, Emergency Room admission, hospital readmission (and individual components of the composite endpoint) |
| Adverse Drug Events   | Day 30 post-discharge | Number and type of adverse drug events  |
| Patient Satisfaction  | Day 30 post-discharge | HCAHPS survey   |

## Trial Results

**Summary results**

**Study results globally**

**Date of posting of results summaries**

**Date of first journal publication of results**

**Results URL link**

**Baseline characteristics**

**Participant flow**

**Adverse events**

**Outcome measures**

**URL to protocol files**