IMPLEMENTATION AND EVALUATION OF TELEPHARMACY DURING COVID-19 PANDEMIC IN AN ACADEMIC MEDICAL CITY: PAVING THE WAY FOR TELEPHARMACY

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### Background and Importance
A leading public healthcare institution implemented a disruptive innovation of Tele pharmacy in pursuit of compliance with the National COVID-19 Response Framework. It emerged and proved to be an essential and critical pillar in suppression and mitigation strategies. Tele pharmacy innovation resulted in Pharmacy staffing protection and provided uninterrupted access and care continuum to the pharmaceutical services, both for COVID-19 and Collateral care.

### Aim and Objectives
To evaluate the impact of implementing Tele-pharmacy during the COVID-19 pandemic on the safety of pharmacy staff and patients.

### Material and Methods
Pharmacy Department redesigned a new workflow that combines both on-site and remote staff through a secured VPN access to our HIS; this new design will prevent any direct interaction between pharmacist and patient or with other health care providers at the same time those new changes won’t compromise on patient safety and medication distribution.

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOTAL NUMBER OF RECEIVED ONLINE REFILL REQUESTS</th>
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<tbody>
<tr>
<td>MARCH 2020</td>
<td>9,115</td>
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<tr>
<td>APRIL 2020</td>
<td>9,600</td>
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<tr>
<td>MAY 2020</td>
<td>2,727</td>
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<tr>
<td>JUN 10, 2020</td>
<td>4,856</td>
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<tr>
<td>TOTAL Number of Requests during 2020</td>
<td>15,550</td>
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<tr>
<td>TOTAL SHIPPED 15 march to June 10, 2020</td>
<td>14,618</td>
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</tbody>
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**WhatsApp service**
- WhatsApp Sent Messages: 14,433
- WhatsApp Received Messages: 18,413

**Remote access order verification**
- Number of orders verified through remote access (OPD): 4,620
- Number of orders verified through remote access (IP): 5,380

### Results
The Pharmacy department has the capacity to switch all out-patient prescriptions to be requested through the online portal and a total of **14,618 medication shipments** got home delivered from **15 March to June 10, 2020**.

**14,618 medication shipments** have been delivered out of **25,520 online requests** submitted, the difference between the number of delivered prescriptions and received requests was due to repeated submissions by patients, or refill due date didn’t arrive.

**WhatsApp Business** has been initiated for direct communication between patients and pharmacists.

Inpatient pharmacy and out-patient pharmacy around **10,030 orders** were verified through remote access.

### Conclusion and Relevance
In conclusion, the implementation of Tele pharmacy via the utilization of medication home delivery services, remote access, and modification of the previous workflow was associated with promising outcomes in terms of efficient, high-quality pharmaceutical care delivery whilst avoiding medication distribution disturbances as well as containing the spread of the pandemic amongst staff and patients, thus, ensuring their safety during this crisis.

### Conflict of Interest
The authors declare that they have no conflict of interest.