Cardiovascular Disease Prevention at the Aswan Heart Centre

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Cardiovascular Disease Worldwide

- 18 million patients die annually of cardiovascular disease\(^1\)
- Majority cardiovascular deaths in mid-low income countries
- Most cardiovascular deaths are preventable

<table>
<thead>
<tr>
<th>Mid-High Income Countries</th>
<th>Mid-Low Income Countries</th>
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<td>American patients: AVAL registry(^2)</td>
<td>Comparative: the PURE study(^4)</td>
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<td>Comparative: WHO PREMISE study(^5)</td>
<td>Egyptian patients: EUROASPIRE IV(^3)</td>
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- Drug compliance three months after hospitalization for cardiovascular events. Participating patients were from one hundred and six hospitals.
- Patient compliance to antiplatelet medication studied across seventeen different countries. Patients studied had a history of coronary artery disease.
- Medication usage is patients from all patient clinics within mid-low income countries. Patients had all forms of coronary artery disease.
- Medication usage up to three years after hospitalization for MI or CAD. Patients studied across 24 European countries.
- Patient compliance to antiplatelet medication studied across seventeen different countries. Patients studied had a history of coronary artery disease.
- Aspirin usage in patients with all forms of coronary artery disease. Patients gathered from outpatient clinics.

Overview

- Secondary prevention of coronary artery disease at AHC focuses on dual antiplatelet medication
- Literature focuses on compliance to care in mid-high income countries
- Questionnaire to assess compliance to care created specific to AHC patient population

Conclusions

Multiple studies show, overall, less than a quarter of patients are not compliant with their secondary prevention care after hospitalization for a cardiovascular event. However, such studies focus on mid-high income countries.

Comparative studies show drastically lower compliance to antiplatelet medication in mid-low income countries, particularly when considering urban vs. rural settings.

Studies focused on mid-low income countries show a wide variety of compliance depending on type of medication.

Factors attributed to lower compliance in mid-low income countries include lack of patient education, lack of standardized protocol, cultural perspectives on medication, financial difficulties, lack of health insurance, poor access to care, inability to refill prescriptions.

Questionnaire

Addresses basic patient demographics, medical and cardiac history, and drug compliance. Preliminary assessment screens for drug use across.

Initial compliance to care assessed from six domains:
1. Cost
2. Side effects
3. Preference for traditional/alternative medications
4. No longer indicated by patient
5. No longer indicated by physician
6. Not locally available

Medication Adherence Scale\(^6\) analyzes adherence behavior, addressing four domains:
1. General perception of medications
2. Cognitive understandings of health and medications
3. Side effects
4. Access to care

References


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