Using the Workload Indicators of Staffing Needs method in setting the National Staffing Norms for Primary Health Care settings

Case of the Sultanate of Oman

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Goal of HRH Development:  
- Right number of people  
- With the right skills  
- In the right place  
- At the right time  
- With the right attitude  
- Doing the right work  
- At the right cost  
- With the right work output
**The Sultanate of Oman**

- Approximately 309,500 square kilometers
- 4 million pop. (43.6% non-Omani)
- Life expectancy: 76.4 yrs
- UFM: 11.4/1000 live birth
- MMR: 17.5/100,000 live birth
- Doctors: 21.4/10,000 pop.
- Nurses: 46.3/10,000 pop.
- Computerized health information system

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**Introduction**

**MOH in the Sultanate of Oman** recognized the importance of ensuring that all health facilities at all levels of health care have the right number and skill-mix of health workers to deliver quality of health care to the population served.

*(Oman Health Vision 2050)*
Objectives

The Directorate General of Planning and Studies and the Directorate General of Primary Health Care worked jointly, using the WISN method with some modifications to:

- Develop the national staffing norms for primary health care settings
- Assist health planners and managers to appropriately recruit and distribute the health workers across various geographical locations and PHC facilities.

Methods

- The PHC services provided were listed and categorized into three packages of services based on the location and catchment population served.
- The three services are:
  - Core services (basic),
  - Supplementary services, and
  - Complementary services.
### Health care services provided at PHC Institutions

<table>
<thead>
<tr>
<th>Core (Basic)</th>
<th>Supplementary</th>
<th>Complementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient clinic</td>
<td>Acute care</td>
<td>Delivery services</td>
</tr>
<tr>
<td>Child health/Vaccination</td>
<td>Infertility</td>
<td>Training facilities</td>
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<tr>
<td>Antenatal and postnatal care</td>
<td>Speciality clinic</td>
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<tr>
<td>Birth spacing</td>
<td>Dermatology</td>
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<tr>
<td>Nutrition and growth monitoring</td>
<td>Internal medicine</td>
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<tr>
<td>Care of elderly</td>
<td>Obstetrics and Gynaecology</td>
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<tr>
<td>Counseling and health education</td>
<td>General surgery</td>
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<tr>
<td>Community outreach services &amp; activities</td>
<td>Orthopaedic</td>
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<tr>
<td>School health services</td>
<td>Nephrology</td>
<td></td>
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<tr>
<td>Mental health care</td>
<td>Eye care</td>
<td></td>
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<tr>
<td>NCDs:</td>
<td>ENT</td>
<td></td>
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<tr>
<td>- Diabetes and endocrinology</td>
<td>Screening services</td>
<td></td>
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<tr>
<td>- Cardiac diseases</td>
<td>Ultrasonography</td>
<td></td>
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<tr>
<td>- Asthma and chronic respiratory diseases</td>
<td>Physiotherapy</td>
<td></td>
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<tr>
<td>Dental care</td>
<td>Environmental health</td>
<td></td>
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<tr>
<td>Laboratory investigations</td>
<td></td>
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<tr>
<td>- Radiology (X-ray)</td>
<td></td>
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<tr>
<td>- Dispensing of drugs</td>
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<tr>
<td>- Medical records</td>
<td></td>
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<tr>
<td>- Triage</td>
<td></td>
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<tr>
<td>- Observational beds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Ambulance service</td>
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</tr>
</tbody>
</table>

- Acute care
- Infertility
- Speciality clinic
  - Dermatology
  - Internal medicine
  - Obstetrics and Gynaecology
- General surgery
- Orthopaedic
- Nephrology
- Eye care
- ENT
- Screening services
- Ultrasonography
- Physiotherapy
- Environmental health

### WISN method

**Analytical planning tool to:**

- Determine how many health workers are required to cope with actual workload in a given facility
- Estimate staffing required to deliver expected services of a facility based on workload
- Calculate workload and time required to accomplish tasks of individual staff categories
- Compare staffing between health facilities and administrative areas

Why use WISN?

- Determine how best to improve current staffing
- Plan future staffing
- Assess where performance is currently low
- Examine impact of different employment conditions on staffing
- Assess workload pressure

Methods

- The main workload components of doctors, nurses, dentists, pharmacists, assistant pharmacists and laboratory technicians were listed, determined and the activity standards were defined and eventually the national norms were formulated.
- The same method of calculation was applied to the health centers in Muscat governorate (the capital) which has 32% of the total population and encompassed the large number of health facilities compared to the remaining 10 governorates.
Findings

- A comparison of the national staffing norms for doctors and nurses with the existing staffing levels in Muscat governorate was made.

- Overall, it showed shortage in the number of nurses and slight surplus of doctors, however with some variations between the health centers.

- The WISN ratio showed that doctors were less workload stressed (1.02) compared to nurses (0.66) although there were some variations between health centers (doctors range 0.6 – 2.3, while nurses range 0.4 – 1.6).

A comparison of the national staffing norms for doctors and nurses with the existing staffing levels in Muscat governorate

<table>
<thead>
<tr>
<th>PHC Norms</th>
<th>Current Situation</th>
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<tbody>
<tr>
<td></td>
<td>Total</td>
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<tr>
<td></td>
<td>PHC Norms</td>
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<tr>
<td></td>
<td>469,691</td>
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<td></td>
<td>1,479,188</td>
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<td>311</td>
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<td>413</td>
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<td>687</td>
</tr>
</tbody>
</table>

Conclusion

The WISN tool, after being adapted, proved to be useful in:

- setting the national norms,
- comparing the existing situation in the PHC health facilities against the national norms,
- knowing the equity and distribution of health workers across the governorate and within the facilities,
- identifying the workload pressure
- better utilization of the existing database
- highlighting the information gaps.

Limitation

- The estimates that were used to calculate the required staffing were linked mainly with the package and pattern of health services provided to current population (which might not be applicable to the future population).

- Thus the estimates need to be frequently adjusted based on the new developments.
Recommendations

Additional parameters could be added in the future to re-adjust the calculation method:

– Health workforce growth
– Age characteristics and gender-specific productivity of health providers.
– Trends in health services utilization pattern by different population groups.
– Optimal level of skill-mix of health workers per qualification and per type of health facility and its internal settings.
– Local diseases profile, demographic characteristics and health needs of population served.
– Changes in health policies.
– Advance health technology and new therapies.

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Thank You