International alliance and AGREE-ment of 45 rapid guidelines on management of critical care patients with COVID-19

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An Oral Presentation for COVID-END Partners’ Meeting

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2. Maher Titi, King Saud University, Saudia Arabia.
3. Muhammad Godah, American University of Beirut, Lebanon.
4. Hayfaa Wahabi, King Saud University, Saudia Arabia.
5. Layal Hneyi, American University of Beirut, Lebanon.
6. Muddathir Hamad, King Saud University, Saudia Arabia.
7. Ghada ElGohary, Ain Shams University, Egypt – King Saud University, Saudi Arabia.
8. Manal Abouelkheir, Misr International University, Egypt.
9. Mohamed Ben Hamouda, INEAS, Tunisia.
11. Pamela Velasquez Salazar, University of Antioquia, Colombia.
12. Jorge Acosta-Reyes, Universidad del Norte, Colombia.
14. Samia Esmaeil, King Saud University, Saudia Arabia.
15. Zbys Fedorowicz, Veritas He S Consultancy, UK.
16. Ailing Zhang, Zhengzhou University, China.
17. Zhe Chen, Zhengzhou University, China.
18. Sarah Liptrott, European Institute of Oncology, Italy.
19. Niccolò Frongillo, European Institute of Oncology, Italy.
20. Amr Jamal, King Saud University, Saudia Arabia.
22. Newman Dieyi, Memorial University, Canada.
23. John Powell, NICE & Oxford University, UK.
24. Katrina Hon, Harvard University, USA.
25. Ivan Florez, University of Antioquia, Colombia – McMaster University, Canada.
Question and methods

- **Overarching**: ‘What is the quality of the Rapid Guidelines (RGs) for management of people with COVID-19 according to the criteria of the AGREE II Instrument? (PROSPERO April 2020).

- Systematic review of RGs focused on COVID-19 (Critical Care).

- Search 1\textsuperscript{st} November 2019-July 31\textsuperscript{st} 2020.

- Medline (OVID), CINAHL, Embase, CNKI, CBM), and WanFang Data.

- Grey Literature Key organizations: WHO, PAHO, G-I-N, Other National CPG websites.

- Articles’ selection and data extraction in duplicate.

- Included RGs were assesses with AGREE II instrument, using ‘MY AGREE-PLUS’ platform.

- Every RG was assessed by 2 reviewers.
Results

• General COVID-19 RGs were retrieved (CPG not PHG).
• We categorized them by clinical specialties (Critical care, ambulatory care, pediatrics, pregnancy and perinatal care, etc.)
• 45 CPGs were focused on Critical care management were included
• International (9)
• National (36)
  • China (10)
  • UK (7)
  • Italy (7)
  • USA (5)
  • Saudi Arabia (3)
  • France (1)
  • Canada (1)
  • Spain (1)
  • India (1)
Table 3. AGREE II Standardized Domain Scores for the 45 included rapid guidelines for critically ill patients with COVID-19.

<table>
<thead>
<tr>
<th>RG ID/AGREE II Domain Scores</th>
<th>Domain 1 (items 1-3)</th>
<th>Domain 2 (items 4-6)</th>
<th>Domain 3 (items 7-14)</th>
<th>Domain 4 (items 15-17)</th>
<th>Domain 5 (items 18-21)</th>
<th>Domain 6 (items 22-23)</th>
<th>Average score per RG (all domains)</th>
<th>OA 1</th>
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Rapid signal for quality of RGs: Low quality: Red <40%, Moderate quality: YELLOW 40%-60%, High quality: GREEN >60%
Results Summary

- Average Domain Scores for the 45 RGs

  - Domain 1: 70%
  - Domain 2: 40%
  - Domain 3: 26%
  - Domain 4: 74%
  - Domain 5: 28%
  - Domain 6: 41%
  - OA 1: 46%

AGREE II Domains

1. Scope and purpose
   - Freq. Scores (%)
     - 17/45 >70% = 37.7%
     - 33/45 >60% = 73.3%

2. Stakeholder involvement
   - 3 /45 >70% = 6.6%
   - 8 /45 >60% = 17.8%

3. Rigor of development
   - 2 /45 >70% = 4.4%
   - 3/45 >60% = 6.7%

4. Clarity of presentation
   - 26 /45 >70% = 57.8%
   - 37 /45 >60% = 82%

5. Applicability
   - 26 /45 >70% = 57.8%
   - 37 /45 >60% = 82%

6. Editorial independence
   - 13 /45 >70% = 28.8%
   - 15 /45 >60% = 33.3%

Overall assessment 1
   - 8 /45 >70% = 17.8%
   - 12 /45 >60% = 26.7%
Summary

• Most of RGs come from HIC (n=25, 56%) and less international (n=9, 20%).
• A high number of RGs developed in 5 months.
• Most RGs were of low-quality (n=33, 73% with lower cut-off 60%).
• Only 3 RGs had AGREE II Domain 3 score higher than 60% (SSC, Ye, & SFAR). Both SSC & Ye >70%.
• Most of RGs lack enough quality to be recommended for use or adaptation.
• AGREE II is useful in assessing RGs as well as ‘conventional’ CPGs.
High-quality RGs (OA1, mean >60%)

1. Alhazzani et al, SSC [D3]
2. Ye et al [D3]
3. Sharma et al
4. WHO
5. PAHO/WHO (Spanish)
6. SFAR (French) [D3]
Key therapeutic interventions (> 2 high quality RGs)

General Supportive Care
1. Hemodynamic Support:
   i. Fluid Therapy
   ii. Vasoactive Agents
2. Supplemental Oxygen Therapy
3. Extracorporeal Membrane Oxygenation (ECMO)
4. Ventilatory Support:
   i. Invasive Mechanical Ventilation
5. Pain, Sedation, and Delirium Management in ICU

Specific COVID-19 Therapy
6. Systemic Corticosteroids
7. Empiric Antimicrobials
8. Convalescent Plasma
9. Antiviral Agents (e.g. Remdesivir, Lopinavir/Ritonavir or others)
10. Recombinant interferons (rIFNs): Alone or in combination with antivirals
11. Chloroquine or Hydroxychloroquine
12. Immunomodulatory Drugs
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