Implementation strategy:
Understanding needs in low and middle income countries

Vivekanand Jha

On behalf of the KDIGO Controversies Conference participants

JSN 2017, Sendai
Deepening Nephrology
~ Science and Practice ~

May 26 (Fri) → 28 (Sun), 2017

Venue
Sendai International Center
Tohoku University Centennial Hall
KDIGO Mission Statement

To improve the care and outcomes of kidney disease patients worldwide through the development and implementation of global clinical practice guidelines.
Clinical Practice Guidelines

Systematically developed statements, to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances
Implementation of guidelines is a local responsibility
Global prevalence of end-stage kidney disease

Romanowski et al. Kidney Int 2016
• By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

• Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
Figure 1. The Health Impact Pyramid.

Frienden, NEJM 2015
How to make public policy?

a. Define the problem in your region

b. Analyze public policy alternatives

- Early detection and prevention
- Rationing or limited access to RRT
- Universal RRT
- Increase kidney transplantation

Savings

- Politically and ethically unacceptable
- Unaffordable
- Savings, better QoL, rehabilitation

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What data do policymakers need?

- What are the data on intensity of AKI and CKD burden and intersection with other diseases/risk factors?
- What is the impact of kidney disease on population health and economics (in terms of DALYs and cost of care)?
- What is the cost-effectiveness of interventions at different stages of CKD?
- What target populations might benefit from kidney disease interventions (e.g., age, groups at increased risk, geographic location, or occupations)?
- Are there local factors that exacerbate or mitigate disease risk or implementation strategies?
- Who are the stakeholders and allies?
- Are there local evidence-based best practice management guidelines, or can global guidelines be adapted to suit local needs?
- What innovations can improve the delivery of care for kidney disease in an affordable and scalable manner in the context of local health system?
- How can we evaluate effectiveness of health care intervention (i.e., components, process and outcome)?
- Is there a need to set up kidney disease registries?
- What is the research agenda for improving locally appropriate implementation?
- What are the metrics for measuring successful implementation and progress of kidney disease prevention efforts?
Chronic kidney disease DALYs per 100,000 (2015)

https://vizhub.healthdata.org/gbd-compare/

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Traditional and non-traditional risk factors interact in CKD development and progression.

CKD
- Communicable diseases
- Non-communicable diseases
- Environmental factors (pollution, toxins)

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Targets for advocacy initiative

- Recognize preventable deaths due to AKI in LMICs as a human rights issue
- Recognize CKD as an important cause of death and disability by national health authorities
- Include screening and management for AKI and CKD in existing or planned NCD and CD programs
- Reduce cardiovascular morbidity and mortality in those with CKD
- Retard progression of CKD and the need of RRT
- Increase government funding for CKD detection and prevention
- Increase access to RRT in an equitable and just manner
- Increase rates of organ donation and transplantation
- Establish a national ESRD registry
Barriers to implementation

Internal
related to the guideline itself

External
related to the clinical environment and particular local circumstances
Internal Barriers

• Ethnic and genetic variations
  – HIVAN
  – Disease behavior in different races/ethnicities

• Differences in disease characteristics
  – Differences in CKD causes
  – Proteinuric v non-proteinuric diseases
External barriers

- **Structural factors**
  - financial disincentives
- **Organizational factors**
  - inappropriate skill mix
  - lack of facilities or equipment
- **Peer group**
  - local standards of care not in line with desired practice
- **Individual factors**
  - knowledge attitudes, skills
- **Professional - patient interaction**
  - problems with information processing.
Barriers to kidney disease care in LMIC

- System-level barriers
  - Lack of access to health insurance
  - Lack of trained manpower and resources
  - Lack of education around standardized, guideline-based uniformity of care

- Kidney disease-specific issues
  - Lack of adequate health systems response to kidney care delivery
  - Omission of kidney disease screening and management in course curricula
  - Lack of data on AKI and CKD burden and its consequences
  - Inadequate understanding of risk factors for CKD development and/or progression
  - Inadequate understanding of the consequences of missed opportunities for kidney disease care
  - Delayed diagnosis and late presentation with advanced disease and complications
  - Fragmentation of information and communication on kidney disease care
  - Lack of locally appropriate or adapted guidelines for kidney disease (e.g., language, complexity, implementation tools)
  - Lack of standardized care tools for physicians and educational tools for patients
Understanding and identifying barriers to guideline implementation

- Understanding the barriers to Change
  - Awareness and knowledge
  - Motivation; Practicalities; Acceptance and beliefs; Skills
  - The external environment
- Identifying the barriers to change
  - Talk to key individuals
  - Observe clinical practice in action
  - Use a questionnaire, Run a focus group,
  - Brainstorm


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Overcoming Barriers to Change

- Educational materials
- Educational meetings - interactive workshops
- Educational outreach visits
- Opinion leaders
- Clinical audit and feedback
- Reminder systems
- Patient-mediated strategies (e.g. mass media campaigns)

Overcoming barriers to change

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Executive summary of the KDIGO Controversies Conference on Supportive Care in Chronic Kidney Disease: developing a roadmap to improving quality care

Sara N. Davison¹, Adeera Levin², Alvin H. Moss³, Vivekanand Jha⁴⁵, Edwina A. Brown⁶, Frank Brennan⁷, Fliss E.M. Murtagh⁸, Saraladevi Naicker⁹, Michael J. Germain¹⁰, Donal J. O’Donoghue¹¹, Rachael L. Morton¹²¹³ and Gregorio T. Obrador¹⁴
Decide leader, stakeholder

Prepare people/environment for GL implementation
  • Account for pt preferences/views

Determine current position
  • Review local environment
  • Audit current practices
  • Identify gaps

Action plan
  • Putting it together

Decide on appropriate implementation techniques
  • With respect to barriers

Evaluate process
  • Audit
  • Reward
  • Modify
Engage stakeholders

1. Identify and define the problem
2. Define the arena (parliament, Ministry, etc.)
3. Identify policy stage (formulation, implementation, evaluation)
4. Develop the project
5. Identify key stakeholders (lawmakers, national or local public health officials, etc.)
6. Develop communication materials
7. Define a plan of action
8. Self-assessment (can we do it?)
9. Start working!

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<td>PLAN FOR FUTURE REVIEW AND UPDATE</td>
<td>Aftercare planning</td>
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<td>PRODUCE FINAL GUIDELINE</td>
<td>Final Production</td>
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Pathway to implementation

Guideline Development
- Document
- Synopsis / Summary

Review & Adapt
- Review for Consideration
- Translate

Implement & Disseminate
- Online Materials
- Exemplary Case(s)
- KDIGO Sessions, Lectures, Clinical Practice Conferences
- Multiple & Global

Evaluation

Time

KDIGO Work Group

Nephrologists, Local Societies, Allied Health Professionals

National Society Meetings

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Possible scheme of implementation of KDIGO guidelines in LMICs

- Vertical and horizontal integration with existing education and treatment programs
- Protocol adapted to National needs (e.g., language, funding, healthcare structure)
- Use of appraisal tool (e.g., “AGREE”) for adaptation as “National Protocols”

**Ambassadors**

**Professional Societies**
- Physicians, nurses, other allied health workers
- Prepare people for National Protocols implementation

**Hospitals & General Practitioners**
- Building sustainable capacity for implementation of national protocols into everyday clinical practice

**Best clinic Practice**
- Patient - physician interaction

**Patients**
Understanding kidney care needs and implementation strategies in low- and middle-income countries: conclusions from a “Kidney Disease: Improving Global Outcomes” (KDIGO) Controversies Conference

Vivekanand Jha\textsuperscript{1,2}, Mustafa Arici\textsuperscript{3}, Allan J. Collins\textsuperscript{4,5}, Guillermo Garcia-Garcia\textsuperscript{6}, Brenda R. Hemmelgarn\textsuperscript{7}, Tazeen H. Jafar\textsuperscript{8,9,10}, Roberto Pecoits-Filho\textsuperscript{11}, Laura Sola\textsuperscript{12}, Charles R. Swanepoel\textsuperscript{13}, Irma Tchokhonelidze\textsuperscript{14}, Angela Yee Moon Wang\textsuperscript{15}, Bertram L. Kasiske\textsuperscript{16}, David C. Wheeler\textsuperscript{17} and Goce Spasovski\textsuperscript{18}; for Conference Participants\textsuperscript{19}

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