Health worker engagement

What’s the connection?
Findings from Tanzania

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Presentation outline

• What do we mean by health worker (HW) engagement?
• Why study HW engagement?
• Study objectives
• Methods
• Findings
• Conclusions and lessons learnt
• Implications for practice
HW engagement study overview

• What is HW engagement?
• Why study it?

• Study objectives
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HW engagement study session overview

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“Health worker who proactively self-improves and applies their competencies to provide quality services with commitment, ethics and care to achieve organizational goals.”

Working definition, Tanzania stakeholder consensus group
• Satisfaction in work, intrinsic and extrinsic motivation, job involvement, connection felt to work and organizational commitment (two way relationship)

• When engaged, employee is physically involved, cognitively attentive, and psychologically connected
Health workforce crisis: 57 Countries

Tanzania
(2013 data)

Nurses & Nurse Midwives: 3.23 per 10,000 population

Medical Doctors: 0.26 per 10,000 population

Pharmacists: 0.08 per 10,000 population

2006 World Health Report
Adults and children estimated to be living with HIV | 2014

Total: 36.9 million [34.3 million – 41.4 million]
Why study HW engagement?

Low salaries, harsh working conditions, inadequate supplies and training

Demoralized, high turnover, disengaged at work, low productivity

Limited impact of financial and non-financial incentives on improving performance and retention

Employee engagement in health and other sectors related to performance, productivity and retention

Engaged HWs associated with improved clinical measures, higher morale and retention (Harter et al., 2002, Wellins et al., 2007)
Factors influencing engagement
Literature and focus group discussions

<table>
<thead>
<tr>
<th>Health worker</th>
<th>Work environment</th>
<th>Socio-economic environment</th>
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<tbody>
<tr>
<td>Attitudes to change</td>
<td>Supervision, coaching and mentoring</td>
<td>Social environment</td>
</tr>
<tr>
<td>Knowledge and skills (competency)</td>
<td>Presence of role models</td>
<td>Accommodation</td>
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<tr>
<td>Values and beliefs</td>
<td>Changes in leadership, reporting structures and organizational processes</td>
<td>Enforcement of rules, regulations and ethical codes</td>
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<tr>
<td>Expectations</td>
<td>Adequacy of resources: HR, equipment, supplies</td>
<td>Cultural norms</td>
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<td>Recognition and reward</td>
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<td>Career advancement</td>
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<tr>
<td>Remuneration (adequacy, timeliness, fairness)</td>
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<tr>
<td>Pension</td>
<td></td>
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<td>Job security</td>
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<td>Workload</td>
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<td>Work-life balance</td>
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<tr>
<td>Language barriers</td>
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<tr>
<td>Empowerment</td>
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<td>Positive attitudes</td>
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HW engagement study overview

• What is HW engagement?
• Why study it?

• Study objectives
• Methods
• Findings
• Conclusions
• Implications for practice
Study objectives

1. Identify characteristics of an engaged HW and influencing factors

2. Explore the relationship between engagement, performance and retention

3. Develop and validate a tool to measure HW engagement
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Mixed methods study design

- Qualitative interviews with 50 HWs
- Self-completed survey with 1330 HWs

- Facility level survey and record review
- 183 randomly selected health facilities, 27 districts, 6 regions

HW engagement characteristics

HW retention

HW, work environment and socio-economic influencing factors

Health facility performance

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Mixed methods study design

Quantitative analysis:
- Descriptive
- Principal Components Analysis
- Two-step cluster analysis
- Comparative analysis

Qualitative analysis:
- Content analysis of based on constructs identified in quantitative analysis

HW engagement characteristics

HW retention

HW, work environment and socio-economic Influencing factors

Health facility performance
Sampling

- 6 regions (27 districts)
- 183 health facilities
- 1330 HWs in CTC and OPD

Stratify by region

Stratify by facility type

Random sample

Comprehensive sample of all HWs providing HIV services/quota

Sample of other HWs
Methods overview (1)

1. Literature review
   - Identify engagement characteristics and influencing factors

2. Focus group discussions in Tanzania
   - Review literature review findings to inform discussion and consensus on characteristics and factors in Tanzanian context

3. Questionnaire development workshop
   - Review agreed characteristics and factors to develop 3-4 questionnaire items and interview questions for each using validated items where available.

4. Content validity – technical review
   - Questionnaire and interview questions reviewed by 6 independent experts: revised based on recommendations

5. Face validity
   - Questionnaire and interview guide administered in the field with comparable respondents (who did not participate in the study) and checked for clarity

6. Translation and translation validation
   - Study instruments translated into Kiswahili and back-translated into English

Collect data

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# Methods overview (2)

<table>
<thead>
<tr>
<th>Data entry and analysis</th>
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</thead>
<tbody>
<tr>
<td><strong>7. Principal Components Analysis (PCA) to identify constructs</strong></td>
<td>• Quantitative data analyzed to identify main constructs for engagement and factors influencing engagement</td>
</tr>
<tr>
<td><strong>8. Reliability testing of identified constructs</strong></td>
<td>• Reliability analysis done for each construct</td>
</tr>
<tr>
<td><strong>9. Cluster analysis</strong></td>
<td>• Data analyzed to identify constructs associated with engagement and performance</td>
</tr>
<tr>
<td><strong>10. Final validated study tool</strong></td>
<td>• Items retained in the questionnaire that were found to be both reliable measures as well as associated with engagement and performance</td>
</tr>
<tr>
<td><strong>11. Qualitative data analysis</strong></td>
<td>• Content analysis to aid interpretation of quantitative findings</td>
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# HW sample characteristics

<table>
<thead>
<tr>
<th></th>
<th>Surveys (n=1330)</th>
<th>Interviews (n=45)</th>
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<tbody>
<tr>
<td>Female</td>
<td>69%</td>
<td>62%</td>
</tr>
<tr>
<td>Age (average in years)</td>
<td>42</td>
<td>43</td>
</tr>
<tr>
<td>Health facility type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health center</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>Public district hospital</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>Public dispensary</td>
<td>22%</td>
<td>16%</td>
</tr>
<tr>
<td>FBO hospital</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Public regional hospital</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>Provide ART services</td>
<td>36%</td>
<td>60%</td>
</tr>
<tr>
<td>Provide out patients department (OPD) services</td>
<td>47%</td>
<td>40%</td>
</tr>
<tr>
<td>Received ART training in the past year</td>
<td>28%</td>
<td>44%</td>
</tr>
<tr>
<td>QI team meets regularly</td>
<td>53%</td>
<td>64%</td>
</tr>
<tr>
<td>Member of QI team</td>
<td>64%</td>
<td>86%</td>
</tr>
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</table>
What are the characteristics of an engaged HW?

Change agent
Proactive, focused on improvements, team player, facilitate learning, shared information
"Because everyday when you are working you can find that there is an area that some mistakes are being done. So as these mistakes not to continue, you have to sit with the person responsible and talk...The aim is so as that mistake is not repeated. In doing so you will have improved that particular person." Medical clinical Officer/male

Job satisfaction
Pride in work, satisfaction with job from seeing improved patient outcomes, sense of competence delivering services they were trained for
“I like it most because when patients come to me and I serve them, I feel satisfied especially when they recover” Assistant nursing officer/male

Accountable
Answerable to responsibilities, clear understanding of job expectations, practice self-reflection
“We also look at the past [planned actions] how many were implemented and whom we are giving that responsibility [to] and why that is failing to succeed.” Assistant medical officer/male

Equitable and client-centered
Quality of care does not vary by client characteristics, treat clients respectfully
“We should keep patients privacy and also we should help them on the basis of their needs. For example you may find a person has depression so we try to help.” Nurse midwife/female

Explains 50% variance
What influences HW engagement?

Support was not limited to technical support, but included support of the HW as a whole. Respondents also indicated that acknowledgement and appreciation from patients motivated them to be engaged in their work.

“When you are not in good terms with your boss, in-charge, and co-workers…you cannot feel good about it, you can’t even go to work on time. But if you are in good terms, even if you have your own challenges, then you even get that desire to come...so this makes someone feel that she is being valued.”

Assistant Nursing Officer/female

“You are not supposed to remain the same person of ten years ago...science is not static...things are changing so fast, so you have to keep yourself updated”

Clinical Officer/male

BUT...interviewees suggested that insufficient resources could increase job dissatisfaction. Also, if facility was understaffed or under-resourced, HWs reported being less likely to stay
**HW engagement and retention**

**Do you intend to change jobs in the next two years? (n=1315)**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
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<tbody>
<tr>
<td>9.3%</td>
<td>77.8%</td>
<td>12.9%</td>
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**Plan to leave the facility? (n=373)**

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<tr>
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<tr>
<td>8.8%</td>
<td>35.9%</td>
<td>55%</td>
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**Plan to leave public sector? (n=343)**

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<tbody>
<tr>
<td>5.8%</td>
<td>32.1%</td>
<td>60.9%</td>
<td></td>
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</table>

**Plan to leave profession? (n=343)**

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<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
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</thead>
<tbody>
<tr>
<td>5.8%</td>
<td>32.1%</td>
<td>60.9%</td>
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**Plan to leave country? (n=347)**

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<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
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<tbody>
<tr>
<td>4.9%</td>
<td>30.5%</td>
<td>63.4%</td>
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**Job satisfaction**

- **Z-scores**
  - Yes: -0.25
  - No: 0.04

**Equitable and client centered care**

- **Z-scores**
  - Yes: 0.19
  - No: -0.03

**Relationship with immediate supervisor**

- **Z-scores**
  - Yes: 0.05
  - No: -0.19

*p < 0.05 but very small differences* ** but very small differences

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“**I think those who quit aren’t dedicated, most of them come into this department expecting to gain money, so they quit as they don’t meet their interest but for the one who is dedicated can never quit**”

**Assistant Medical Officer/male**

“**if you move from your department to another department you can see that you cannot manage to provide good service to your clients**” **Assistant Medical Officer/male**
<table>
<thead>
<tr>
<th>Group 1 (n= 52)</th>
<th>Group 2 (n=79)</th>
<th>Group 3 (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Improvement team presence</strong></td>
<td></td>
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<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Scores for engagement characteristics and influencing factors (z-scores)</strong></td>
<td></td>
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<tr>
<td>% of ART patients loss to follow up</td>
<td>10.8%</td>
<td>13.6%</td>
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</table>
Relationship between engagement and performance: Facility-level cluster analysis

• Health facilities with more engaged health workers perform better in some tasks:
  – Higher average % of children born to HIV infected mothers who were started on co-trimoxazole within the first 2 months (74-78% vs 39%)
  – Lower average % of HIV infected patients on ART who were lost to follow up (11-14% vs 36%)

• No relationship between health worker engagement and performance in other tasks:
  – % of pregnant women attending ANC that were tested and found to be positive and registered to attend CTC
  – % HIV patients screened for TB at clinic visits
  – % HIV patients from CTC getting CD4 tests at least once every 6 months
  – % HIV patients initiated within 6 months with CD4 count results
  – % exposed children that attended clinic last month recorded to continue co-trimoxazole
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Conclusions and implications for practice

Engagement **not associated** with perceived adequacy of resources

– Engagement may be independent of the level of resources a health facility has

– Engagement could potentially be influenced, even in the most poorly resourced settings

– Having greater resources in a health facility does not mean that health workers are more engaged as a result

**BUT** HWs experience job dissatisfaction when there are insufficient human and material resources
Conclusions and implications for practice

- Engagement **associated with better performance in some tasks** that require problem solving, team work and multiple processes to work together—all important for assuring the HIV continuum of response
  - Engagement was not associated with performance in tasks such as undertaking lab tests

**Steps to improve engagement of the health workforce:**
- Strengthen relationships with immediate supervisors
- Support quality improvement efforts
- Strengthen peer learning to improve competencies
Acknowledgements

- Tanzania Health Worker Engagement Data collection team
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