

Training leads to improved performance of Health Unit Management Committees in south western Uganda manuscript

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1 Training leads to improved performance of Health Unit
2 Management Committees in southwestern Uganda

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11

12 **Abstract**

13

14 **Background:** A quality health workforce is critical for the development of health systems and
15 effective delivery of health services. In southwestern Uganda, Health Unit Management
16 Committees (HUMCs) are central to the delivery of health care. They also play a key role in
17 facilitating links between health centres and the community, as they comprised of community
18 members. While these teams took part in planning and management training between 2012-2015,
19 no analysis had been done with regards to the outcomes of these training. This study sought,
20 therefore, to determine whether HUMC members saw increased performance outcomes as a
21 result of their training.

22

23 **Methods:** The study followed a cross sectional evaluation design and adopted qualitative
24 methods, including Focus Group Discussions (FGDs), Key Informant Interviews (KIIs) and In-
25 Depth Interviews with health unit In-charges (managers), district health team members and
26 project intervention staff. Evaluation was conducted in July 2016 in Bushenyi district in
27 southwestern Uganda. Evaluation was completed in all levels of health care centers and in both
28 urban and rural settings. Data was collected by members of the research team in both
29 Runyankole and English, and translated into English.

30

31 **Results:** Findings revealed that HUMCs reported to be more capable of handling issues at the
32 facility as a result of knowledge and skills acquired during trainings. HUMCs identified several
33 key learning themes, including: conflict resolution, strengthened relationships between members
34 and increased community engagement. The training also resulted in several initiatives for

35 increased health care outcomes, including saving schemes for emergency transportation of
36 referrals, construction of placenta pit and canteen, and beautification projects. Overall there were
37 positive feelings towards the training and its relevance for HUMCs' job performance.

38

39 **Discussion:** In examining the results of the study, conclusions can be drawn that training for
40 HUMCs, which had been the first of their kind in this area, increased performance outcomes in
41 health centers. This aligns with similar research, which identified management training for
42 health care management teams as an important factor for improving the delivery of health
43 services.

44

45 Key words: Health workers, Health unit management committee, Mbarara University of Science
46 and Technology

47

48 **Introduction**

49 In resource-constrained countries, the need for a quality health workforce is critical for
50 effective health service delivery. This requires substantial investment and effort. Health
51 professionals at all levels require context appropriate planning and management training in order
52 to address current demographic, epidemiological, technological and socio-economic changes [1].
53 This training is crucial in improving service delivery[1].While the importance of health care
54 (frontline) workers training has been recognized, evaluated and tracked, evaluation of training for
55 those who supervise front line workers with respect to the quality of health care delivery has not
56 received the same attention in low income settings in resource-constrained countries.

57 In Uganda, Health Unit Management Committees (HUMCs) and health workers are critical
58 for the planning and management of Level 1 health units, the lowest level in the health system.
59 HUMCs are composed of members of the community and appointed by the local government (at
60 the geographical level of district). HUMCs provide an opportunity to engage communities in
61 improving the health care service delivery in their facilities. They also provide oversight and
62 leadership for health units and help ensure community engagement/ownership of health center
63 programs. The roles and responsibilities of HUMCs are detailed in the Uganda Ministry of Health
64 Guidelines for HUMCs[2], and can be seen as compared to those of the health workers and facility
65 In-Charges (heads/managers of health units) below (Table. 1). The three groups are intended to
66 support each other in improving local service delivery, but this is largely dependent on whether
67 there is a trusting relationship between HUMCs and the local health workers. In-Charges are
68 members of HUMCs who act as the representative for the health care workers in their particular
69 facility.

70 Table 1: Comparison of Roles between Health Unit Management Committees, Health Workers,
 71 and In-Charge staff

HUMC	Health Workers	In-Charge
<ul style="list-style-type: none"> - Monitor general administration of health facility - Manage finances - Monitor procurement, storage and utilization of goods and services - Improve communication with public - Support health workers 	<ul style="list-style-type: none"> - Daily care for health care facility - Deliver disease prevention and health promotion services 	<ul style="list-style-type: none"> - Head of health unit - Planning and directing local programming - Financial management - Health policy implementation - Coordination of stakeholder activities - Human resources management - Data management and reporting [3].

72

73 Ideally, health care workers and the HUMCs work together to address conflicts between
 74 staff and community representatives. Areas that potentially raise conflict may involve the control
 75 of dispensary funds, concerns about inadequate staff, facility staff turnover, low payment and
 76 motivation of staff [3]. The Uganda Health Workforce Study noted that job satisfaction includes
 77 the importance of salary, a good match between the job and the worker, active involvement in the
 78 facility, a manageable workload, supportive supervision, work/life balance, job security and a job
 79 perceived as stimulating or enjoyable[4].

80 In response to the planning and management challenges for both health centerr (HC) staff
 81 and management committees, Healthy Child Uganda (HCU), a partnership program between
 82 Mbarara University of Science and Technology (MUST) and the University of Calgary, Canada,
 83 implemented the “Scaling up Comprehensive Maternal, Newborn and Child Health (MNCH)
 84 Programming to Create a Model District in Bushenyi,” also known as the ‘MamaToto model.’ The
 85 MamaToto model involved capacity building at three levels: the community, level 1 health centers,

86 and the Bushenyi health district program, which deals with macro level policy change and
87 administration, as well as the required reporting to the national level. The MamaToto intervention
88 team worked to strengthen MNCH capacity in the district in several tangible areas, including
89 planning and management training for all HUMCs within the district. This training was voluntary
90 and unpaid, and took place over a three consecutive days. Topics discussed included: management
91 and conflict resolution, communication, roles and responsibilities, planning, budget and financial
92 and quality improvement specifically in areas of MNCH. Between 2012 and March 2015, 36 health
93 center in-charges and 137 HUMC members from 25 health centers were trained.

94 Both an external and internal post-project evaluation of the MamaToto project documented
95 a number of positive outcomes of the project including improved MNCH outcomes such as
96 decreased morbidity, improved household health practices and increased care-seeking after two
97 years [5]. Contraceptive prevalence rate increased from 40% to 51% and unmet need for
98 contraception improved from 55% to 34% [5]. However, the performance of HUMCs as a result
99 of their training was not included in the evaluation. This study therefore sought to understand the
100 tangible effects of the training on quality improvement in health facilities, including in role clarity,
101 knowledge retention and overall management.

102

103 **Methodology**

104

105 A qualitative approach was used; specifically focus group discussions (FGDs), in-depth
106 interviews and key informant interviews (KIIs), in order to explore the perceptions and
107 experiences of the HUMC members who received the leadership and management training
108 between 2012 and 2015.

109

110 **Study Area and Population**

111 This evaluation study was undertaken in 2016 in Bushenyi District, Western Uganda,
112 where the HUMC trainings had taken place. The district is made up of mainly Banyankole people
113 of the Bantu ethnic group. The major economic activity in the area is small holdings agriculture.
114 Bushenyi has one municipal council and several town councils, and has a primarily rural
115 population. Bushenyi district has 23 HCIIIs, 8 HCIIIs, and 2 HCIVs (wherein the number and level
116 of services available increases as the level of health center increases- see Table 2) serving a
117 population of 235,6217 [6]. A total of 25 health facilities had participated in the HUMC training
118 evaluated in this study

119 This study included seven focus group discussions (FGDs) with HUMCs at various health
120 center levels (HC): HCIV (serves the county or parliamentary constituency area), HCIII (serves
121 sub-county area), and HCII (out-patient services, serving the parish level). A total of seven in-
122 depth interviews were conducted with In-charges and four key informant interviews (KIIs) with
123 the personnel from the Bushenyi District Health Officer; District Finance Officer, District Data
124 Officer and Project Manager of HCU/MUST.

125
126

Table 2: Participants by Number and Role from the different health center levels

Facility	Location	Focus Group participants	In-depth Interviews
HCIV 1	Rural	6	1
HCIV 2	Urban	5	1
HCIV III 1	Rural	5	1
HCIV III 2	Rural	5	-
HCII 1	Urban	4	1
HCII 2	Rural	-	1
HCII 3	Rural	-	1
HCII 4	Rural	4	-
HCII 5	Rural	4	1
Total		33	7

127
128 Of the 33 participants, 42% were female, most aged between 40 to 50 years. Their highest level
129 of education was 18% primary, 36% secondary, 45% post-secondary while 51% were farmers,
130 30% formal were in employment and 15% were retired.

131
132 **Participants and Inclusion Criteria**

133
134 *Focus Group Discussions*

135 The selection of FGD participants was purposive, taking into consideration the location,
136 level/grade of the health unit and whether the HUMC members had received training under this
137 study. Care was taken to ensure that there was representation from both urban and rural health
138 center settings at all levels possible. A total of six HCs chosen were rurally located and two in
139 urban areas. The inclusion criterion for focus groups was based on attendance at HUMC member
140 training.

141 The initial projected numbers for FGDs had to be modified when it was discovered
142 during the selection process that existing government guidelines provided for a minimum of five
143 HUMC members at HCIIIs, seven members at HCIIIs and nine members at HCIVs, which was
144 less than originally anticipated. As a result, the FGD and interview that were conducted at a HCII
145 during pretesting were added to increase the breadth of data sampling. This was possible because
146 the changes made after pretesting were minor and did not affect the data collected. While all
147 HUMC members were invited some were not in attendance, giving an average of four
148 participants at HCII, five at HCIIIs and six at HCIVs. All trained HUMC members were invited
149 through their In-charges to participate in the FGDs. Each of the selected health centers served as
150 the venue for the discussion with its own HUMCs as participants.

151

152 *Key Informant Interviews and In Depth Discussions*

153 Health Center In-charges were selected for in-depth interviews since they serve as the
154 secretaries in the HUMCs. The participating In-charges therefore also had to have attended the
155 management training during MamaToto implementation. Staff that had not been trained were
156 excluded from the study. Participants for KIIs were selected for their position in the district and
157 whether they held their position at the time that the MamaToto trainings took place. KIIs targeted
158 a district health officer, a district accountant, a statistics officer and the project manager for
159 HCU/MUST.

160
161 **Data Collection**

162
163 Field testing for the FGD and key informant interviews probes was conducted at an HCII
164 prior to the data collection. After the interview guide was piloted it was modified slightly and
165 approved by the research team. Interviews and FGDs then were conducted by the primary
166 investigator (TK) and assisted by two trained research assistants (graduates with experience in
167 health facility management) and two note takers over a five day period, with each focus group and
168 key informant interview taking no longer than two hours each. All researchers spoke both English
169 and the local language, Runyankole. They were trained by the evaluation team prior to entering
170 the community in administering the tools and taking notes in a professional, respectful and friendly
171 manner. The interview team members had not been part of the MamaToto HUMC training, and
172 had no previous interaction with participants. Focus groups were semi-structured, with participants
173 being asked various open-ended questions about their training and its results. All FGDs were
174 conducted in Runyankole, audio taped and notes recorded. KIIs and in-depth interviews were
175 conducted in English. Collected data was transcribed and translated together with the field notes
176 taken during interviews by a team of experienced transcribers. All transcriptions were verbatim.

177 All translations with originals were reviewed by members of the team, all fluent in both English
178 and Runyankole to ensure veracity.

179
180 **Data Analysis**

181
182 Thematic content analysis was used. The same team members who had collected the data
183 were involved in the data analysis and theme identification. This process involved familiarization
184 with the data through repeated readings of the transcripts and review of the audio files and field
185 notes. Responses were noted and the recordings attributed according to the different groups of
186 participants (HUMCs, In-charges, and KIs). The majority of the themes had been preset during the
187 data collection phase. Confirmation of themes was based on the most frequently emerging
188 responses from the different categories of groups. The identified themes were then used to
189 construct subthemes. Each theme was entered into a separate Microsoft Word file and statements
190 that fit the theme were collated to that file. Key statements from the different themes were
191 identified and highlighted as quotations to illustrate results. In analyzing the data, FGDs were
192 compared based on the issues raised by participants rather than the frequency of issues raised. This
193 ensured that ideas from all participants were incorporated. Ideas that a majority of the participants
194 raised or agreed by consensus were also noted and marked as patterns to reinforce the group data.

195
196 **Ethical Considerations**

197
198 Ethical approval was obtained from Mbarara University of Science and Technology
199 Institutional Review Committee (No.07107-16). Permission to collect data was gained from the
200 District Health Office of Bushenyi prior to the study. An informed consent form in English and
201 Runyankole was designed and used to gain permission from participants. Key components of the
202 form included confidentiality, right to participate or not to participate, benefits and risks.

203 Acceptance to participate was through signing the form that was witnessed by the researchers and
204 one copy remained with the participant. Health center In-charges and key informants were given
205 the English version of the consent form. All personal information was omitted in order to maintain
206 confidentiality of the respondents.

207

208 **Results**

209

210 The objective of the study was to evaluate the performance of HUMC members and HC
211 In-Charges in Bushenyi District following training initiatives. The study results are presented in 6
212 thematic areas created prior to the evaluation and confirmed during the FGD and interviews:
213 training content and relevance, role clarity, improved relationships between health workers and
214 management, increased capacity for leadership and innovations, and community engagement.

215

216 **Training Content and Relevance**

217 Discussions focused on both the content and relevance of the training to the HUMC
218 member work. Training topics mentioned included management and leadership, effective
219 communication, conflict resolution, financial management, budgeting and planning:

220 *“We were trained in management and leadership by HCU, that if you are a leader you*
221 *must be an example. We were also trained in conflict resolution. We were also trained to*
222 *have effective communication. We were also trained on how to monitor facility finances.”*

223 (FGD HCIV)

224 The overall impression was that participants felt the training was timely and relevant. The reactions
225 to the training were generally positive with many noting it was relevant to their roles and long
226 overdue. Most participants commented that the training was the first of its kind. The relevance of

227 the management training was expressed in the words of both a key informant and a HUMC
228 member:

229 *“Very relevant. In fact, it was relevant in the sense to the extent that participants could be*
230 *demanding more and when participants ask they have understood. Trainings of MamaToto*
231 *followed another training of [community health worker] orientation. The training brought*
232 *in a new intervention that was unique looking at what is applicable but not diverting from*
233 *the existing policy and standard.”* (Key Informant-District Official)

234
235 *“Through the training I learnt much. I now know how to manage my staff, how to manage*
236 *finances, how to manage the health facility, make the work plan and also accountability.”*
237 (Interview HCII)

238

239 **Role Clarity**

240 Results suggest that HUMC members carry out their roles as stipulated in the Uganda
241 Ministry of Health guidelines for HUMCs [3]. Interviews and FGDs revealed several key roles
242 were clarified and strengthened through the HUMC training. Key roles highlighted included
243 representation of the community, advocacy for better services including upgrades of facilities,
244 planning and budgeting and monitoring. Other roles reported included public relations,
245 particularly promoting facility staff-community relations and managing feedback with
246 communities:

247 *“After the training, I learned about the roles of the committee members at the health*
248 *facility. It increased my participation. I learned that I also have authority at the facility to*

249 *ask why she hasn't worked, why he isn't treating patients he is just seated, or may be to*
250 *discuss with the health workers. It brought me closer to the staff.” (FGD HCIII)*

251 Participants also reported their responsibility for checking on theft of drugs, especially in nearby
252 drug shops and clinics. In one FGD participants mentioned moving around clinics in the
253 community to ensure that shops are not selling government drugs.

254 *“.....one health worker in my area did it. People saw him and called me thinking because*
255 *I was working in the facility, they thought I had the authority to get him. I went and told*
256 *the owner of the clinic. I even got those drugs from that clinic and gave that person last*
257 *warning and since then stealing of the medicines stopped.” (FGD HCIII)*

258 These roles were reported across all FGDs and confirmed by key informants and in-depth
259 interviews, and were consistently shown to be strengthened as a result of the HUMC training.

260

261 **Improved Working Relationships**

262 A significant number of interviews reported that an atmosphere of mistrust and suspicion
263 had previously prevailed, particularly in the relationship between HUMCs and facility staff.
264 Among the causes of mistrust included misuse of finances, theft of drugs, and issues of authority
265 and power:

266 *“Yes, yes the other time it was just like a win-lose. They [meaning HUMCs] would look at*
267 *facilities as watch dogs and In-Charges look at HUMCs as a rival but now they work*
268 *together in close harmony. Some issues at facility level are managed there. The ones which*
269 *reach here are only disciplinary.” (Key Informant - District Health Official)*

270 This participant's response shows that prior to the training there was a significant power struggle
271 between HUMCs and their facility In-Charges. According to interviews, this is believed to have
272 caused disunity to the extent that facility issues and problems were unable to be managed. The
273 training was thus credited for creating better relations between the two groups:

274 *"I think a lot has changed. The training helped us to work better with HUMCs. You see*
275 *before the training, us and HUMCs were suspicious of each other. The training made us*
276 *aware of our roles. We are more open to each other"* (In-charge HCIII)

277 Across discussions, participants reported that the trainings helped in forging understanding,
278 collaboration and improving conflict management. HUMC members reported increased
279 involvement in managing both internal and external conflicts and increased confidence in conflict
280 management: Minor conflicts were mostly resolved within the facility while major conflicts moved
281 beyond the facility. Overall teamwork between facility staff and HUMCs was clearly presented in
282 discussions as having improved as a result of the HUMC training.

283 **Increased Capacity for Leadership and Innovation**

284 Participants across FGDs and interviews noted an increased capacity for leadership,
285 effective communication, facility supervision and monitoring of both facility and staff as a result
286 of their training. Participants noted that they felt more confident in creating schedules, managing
287 conflict, delegating tasks and facilitating meetings, all of which came as a result of the HUMC
288 training.

289 *"Some of us were poor facilitators and the skills acquired from HCU have helped us in our*
290 *trainings and basic management. We are now assertive and handle many issues"* (FGD
291 *HCII)*

292 As part of leadership development, training participants were also encouraged to develop low-cost
293 initiatives for their health centers for lasting improvements to the facility and the community. The
294 training resulted in the insemination of a number of savings initiatives that helped to improve
295 access to health facilities by community members, as well as several other innovations.

296 An emergency transport fund was set up in three HCIIIs as a result of this aspect of training,
297 primarily for emergency transport of patients experiencing financial challenges to another facility.
298 A placenta pit was built in one HCII as a result of the training. The pit was constructed at the HC
299 through the contributions of HUMC members. In another health facility, HCIII, a canteen was set
300 up to help generate money for the facility, with the dual purpose of improving staff-community
301 relations through informal conversations and sharing of food. An FGD participant explained the
302 initiative that was developed as a result of HUMC training:

303 *“We went an extra mile, we mobilized for the canteen as HUMC members to sustain our*
304 *health workers (this is all through mobilization) we even have a small hotel to help patients*
305 *and staff. In our savings ‘from meeting allowances’ we were able to put up a gate at the*
306 *entrance of the facility.” (FGD HCIV)*

307 Other innovations included planting and maintenance of trees and flowers to beautify the facility,
308 spot check visits and fencing of facilities through communal efforts. Overall, the training was
309 found to contribute to significant improvements at the health facilities and increased engagement
310 of HUMC members in overseeing the facilities. These initiatives were also found to have positively
311 improved delivery of services by the health facilities.

312

313 **Community Engagement**

314 HUMC members reported participation in mobilization, education and improving public
315 relations between HCs and communities through knowledge and skills gained from the trainings.
316 One major area of community education focused on safety and availability of medication in health
317 facilities. For instance, before the training most community members reported that they perceived
318 health facility staff to be involved in theft of drugs, particularly during shortages of medical
319 inventory. This was attributed to limited community sensitization by HUMCs as well as limited
320 transparency of facility staff. After the training HUMCs engaged in public awareness campaigns,
321 fostering understanding in the community as to when drugs were available, the type of drugs that
322 were to be available and the diseases and illnesses that were treatable at facilities depending on the
323 level of facility.

324 Similarly, the training showed an increase in community engagement in the areas of patient
325 mobilization, care and follow up.

326 *“Almost every sub county has a representative and we gather all concerns and other*
327 *information on the services of the health facility and when we come in a meeting we discuss*
328 *about them.” (FGD HCIII)*

329 Improved relationship between community, health workers and health management team members
330 resulted in an increased number of community members seeking health services, especially for
331 antenatal services, all of which was related back to participation in the training of HUMC members
332 and in-charges.

333 **Discussion**

334

335 The objective of this evaluation study was to determine to what extent the HUMC
336 training that took place through the MamaToto initiative had improved workplace performance
337 of HUMC members and in-charges in the Bushenyi District. The data collected from both
338 HUMC members and in-charges suggested an overall improvement in both quality of work and
339 workplace culture took place across all health centers. Interviewees were able to recall
340 information received during training, which demonstrated valuing of the training. The training
341 was declared to be highly relevant, discussing real issues as felt and experienced by HUMC
342 members and providing the practical skills and knowledge to address these issues. Further, the
343 training was seen as directly correlated to improved role clarity, conflict management, leadership
344 and innovation and community engagement.

345 These results, in line with the MamaToto initiative's goals, show that increased training
346 did improve the quality of health unit management teams in south western Uganda. Further, the
347 increased quality of the teamwork improved the quality of care received by patients, especially in
348 the areas of innovations taken on by HUMC members. Based on our findings, training was seen
349 as a valuable undertaking, with tangible results of perceived local significance. This is in line with
350 the findings of other researchers in low resource countries. In a study by Uzochukwu et al. (2011)
351 [7] a comparison made between health committee members with and without training revealed
352 that training improved agenda setting for meetings, frequency of meetings, responsibilities
353 performed and trust amongst members and the health care workers. A similar analysis by Crigler
354 et al. (2014) [8] highlighted the importance of training for community workers and emphasized
355 the need for continual training. This focus on continual training was found to be a key investment
356 if local health leaders are to be utilized as effective, trusted agents of participation and governance.
357 Health care workers who have been trained in leadership and management are more likely to make

358 sound decisions, to delegate tasks effectively, to manage conflict well and to develop innovative
359 ideas for their health care centers.

360 While both Uzochukwu et al. (2011) [7] and Crigler et al. (2014) [8] showed the benefits
361 of training of front line health care workers, our study specifically addressed the role of HUMCs
362 and in-charges expanding the existing research to include those at a supervisory or administrative
363 level working within local health centers i.e. not just the health care workers. Most notably, this
364 study demonstrated the importance of policy-level investment in training for HUMC members in
365 leadership and management. As an investment, training changed workplace interactions and lead
366 to higher quality of care for the patients being served. The study provided a new perspective on
367 the relationship between HUMCs and health care In-charges, and demonstrated the value of
368 training in bringing these two levels of staff together to identify and solve problems as well as
369 improving community engagement and their health seeking behaviors.

370 Due to the limited study area the generalizability of the study beyond Bushenyi District
371 can only be reliably inferred. However, one would expect given that similar observations were
372 made by participants from across the district – both in urban and in rural HUMC settings, that the
373 findings are likely applicable where similar structures to HUMCs and in-charges exist.

374 For Uganda the implications for future practice are far reaching. The positive impacts seen
375 here with HUMC member and in-charge training in attitude, action and impact on health outcomes
376 is very promising. The validity and necessity of leadership and management training for
377 optimizing health care management team impact locally has been well shown. The value of
378 expansion and adaption of this training to other districts in Uganda is thus strongly suggested.
379 Beyond Uganda, given the potential for impact on local health outcome, the findings from this
380 evaluation suggest that similar training adapted to fit frontline health care management structures

381 in other resource constrained countries is merited. i.e. scaling up. In contrast to many suggested
382 scale ups following a successful pilot study, this up may be feasible as the actual cost of the training
383 was low – three day sessions given by local experts and no per diems for participant attendance.

384

385 **Conclusion**

386 The HUMC member and in-charge training was shown in this evaluation to have been a
387 timely, relevant and affordable strategy for improving job performance at the front line. Overall,
388 participants observed that with this training they became more involved, engaged, innovative and
389 motivated in executing their roles. Key training messages about the roles of each stakeholder,
390 community education, and conflict management were well heard, understood and acted upon with
391 good effect and local benefit on health care seeking behavior in the community. This study also
392 showed the thirst for such training. Given the relatively low cost and resources need for such
393 training and its impact locally, HUMC member and in-charge management training needs to be
394 expanded across Uganda and adapted for use even beyond Uganda.

395

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397

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