

## Følgebrev

Kære Karen Elise Jensen Fond,

Hermed vores 5. projektrapport beskrivende aktiviteter og resultater i projektet: "Training and support of Primary Care Providers in Rwanda: Avenues for Improvement", for perioden September 2015 til marts 2016.

Vi skriver ligesom sidst rapporten på engelsk, da dette tillader hele forskningsgruppen at bidrage, samt at rapporten derved også kan være tilgængelig for vores lokale samarbejdspartnere m.fl.

Igen skriver vi gerne en rapport på dansk, hvis dette er ønskeligt.

Mange venlige hilsener og på vegne af projektgruppen,

Per Kallestrup

### Annex:

- 1: Summary of activities and results
- 2: Publication Overview

Skulle der være ønske om yderligere information om projektet udover disse bilag, kan det hurtigt fremsendes på forespørgsel.

## Project Report: Training and support of Primary Care Providers in Rwanda: Avenues for Improvement

The activities are described according to the three main study fields, namely:

1. External supervision in primary health care
2. Patient provider communication
3. The practice of diagnosis in primary health care

Additional project activities are described as well.

### Study field 1. External supervision in Primary Health Care (PHC)

This study field includes 2 qualitative studies, development of an instrument to measure support in supervision and systematic reviews.

#### Qualitative Supervision Data

The qualitative data concerning supervisors' and health centre providers' perspectives on supervision collected through focus group discussions has been fully analysed. Two articles describing the qualitative data have been drafted, for which the preliminary titles are the following:

"The relationship between Rwandan primary care providers and their district supervisors", and "Balancing evaluative and educative purposes of external supervision of Rwandan primary care facilities".

#### ExPRESS

The ExPRESS tool, the self-developed questionnaire to evaluate supervisor support, has been assessed for relevance by 4 international experts in 'supportive supervision', which has improved the tool to a great extent. This has been sent for further relevance assessment in South Africa, Kenya, Tanzania, Botswana and Uganda. Further validity-test and relevance test has been carried out in Rwanda as well, and local experts have done a renewed scientific translation into kinyarwanda of the improved tool, thus ready for a final field study this autumn.

#### Systematic Reviews

A systematic review on Supportive supervision in Africa has been published:

- 2016. Bailey C, Blake C, Schriver M, Cubaka VK, Thomas T, Martin-Hilber A. A systematic review of supportive supervision as a strategy to improve primary

healthcare services in Sub-Saharan Africa. *International Journal of Gynecology and Obstetrics* 132 (2016) 117– 125.

A systematic review on Supervision Evaluation Tools is in the process,

## Study field 2. Patient Provider Communication (PPC)

### Communication Assessment Tool (CAT)

For the second study field concerning Patient-Provider Communication (PPC), a validated questionnaire used to evaluate the communication and interpersonal skills of health care providers, the Communication Assessment Tool (CAT), has been translated and culturally adapted to the Rwandan context. Preliminary field-testing for the validation of the kinyarwanda version has been done with 111 respondents. Further field-testing is planned and the article related to the adaptation and the field-testing is in process.

### Qualitative PPC Studies

Generally, there are very few studies exploring the preferences and challenges around PPC in African contexts, and we therefore planned two qualitative studies about PPC. One concerning the patients' perspectives on PPC (PPC Study 1), the other concerns the providers' perspective on PPC (PPC Study 2). For both studies, interviews will be carried out with patients/providers. Research protocols and interview-guides are developed for both studies.

### USA Visit

Vincent participated in an International conference on communication in healthcare in New Orleans in October 2015. Here, he presented the work on the translation, cultural adaptation and field-testing of the Kinyarwanda version of the CAT. He was privileged to present to and to discuss with the developer of the original CAT as well as many other communication experts who provided rich and relevant feedback.



*Vincent presenting at the International Conference on Communication in Healthcare, New Orleans 2015*

## Study field 3. Diagnostic practice in Primary Health Care

### Consultation Study

In “The Consultation Study” we explore health centre providers’ perspective on their preparedness for diagnosing patients in the consultation room of primary care facilities in Rwanda. The data collection has been finalized, which includes 9 in-depth interviews with health providers; A2-level nurses<sup>1</sup>, A1-level nurses<sup>2</sup> and Clinical Officers, working in Out-Patient Department (OPD) in rural and urban health centres in Rwanda.

In addition, semi-participatory observation of providers during their consultation practice has been done to triangulate and validate the findings from the interviews. Also, to better understand the educational preparation of A2 and A1 level nurses we interviewed key trainers at St. Elisabeth School of Nursing and Midwifery, and will review the study curricula for the A2 nursing, A1 nursing and Clinical Officer educational programs.

The analysis of the data is in process, where the first step has been completed, including coding of data. Beneficially, the two research assistants, Ditte and Janvier, have worked in close collaboration on the data collection and the data analysis.



*The two research assistants, Ditte Andreasen and Janvier Kanitare collecting data at Kivumu health centre*



*Interview with the “titulaire” (health center manager) at Shogwe Health centre, which the Karen Elise Jensen Foundation also visited during their stay in Rwanda*

### The research Office

The research team has been working at the new research office at the St. Elisabeth School of Nursing and Midwifery in Muhanga, which was kindly provided by the school, and will function as base for a research unit for primary health care. The research team has already

<sup>1</sup> A2-level is nurse-focused secondary school-level

<sup>2</sup> A1-level a 3-year bachelor education at University

established a network of collaborators, and is benefitting from being in close daily contact with students, teachers and other important stakeholders.

Vincent will continue using and further establishing this office and research unit as Michael and Ditte will leave Rwanda in late March. Michael will assist from afar while finishing his PhD, whereas Ditte is going back to her Master Studies, where she will also use the work on the “Consultation Study” for her Master thesis. She will still continue relevant project activities in collaboration with Michael and Vincent.



*A1-level nurse students at the St. Elisabeth School and Midwifery discussing with the research team the scale to use for the ExPRESS tool*

## Other project activities

### Twin-PhD Evaluation

To provide other global health researchers with an insight into the unique research collaboration method of a Twin-PhD model, the researchers are writing a second article on this matter. A fairly new research method has been used for this, namely a **duo-ethnography**. This method is beneficial as it allows the PhD-students to describe the Twin-PhD model in-depth from a joint perspective. Two interviews have been carried out with the two PhD-students about the structure, process, strengths and weaknesses of the Twin-PhD model from a jointly formulated question guide between Michael, Vincent and Ditte. Additional interviews are planned with Per Kallestrup, the main supervisor.

The interviews have been facilitated by Ditte, who is very familiar with the twin PhD-model, and at the same time serves as an objective assessor in evaluating the Twin-PhD model.

## Teaching activities

The research team, under the department of primary health care at the University of Rwanda, has helped to develop a 4 year full curriculum in Social and Community Medicine targeting medical, dentistry and pharmacy students.. Michael, Vincent and Ditte have started teaching students of both year 1 and year 2. Vincent will continue working with the department of primary health care in the development of the curriculum as well as in teaching. One of his primary subjects is Patient-Provider-Communication, which is also his main study field. The research team has collaborated in drafting a research protocol for a study about students' evaluation of the teaching material, which they will continue developing further.



*Teaching session for 2<sup>nd</sup> year medical, dentistry and pharmacy students at Huye campus, University of Rwanda*

## Publications

The two PhD-students have written and published many articles already, and are in the process of producing further articles related to the 3 study fields (see annex 2).

With Kindest Regards,

Per Kallestrup  
Vincent Cubaka  
Michael Schriver  
Ditte Andreasen

## **Annex 1: Summary of Activities and Results**

### **Supervision**

#### **Systematic Review**

- Systematic review on supportive supervision in Africa published
- Systematic review on Supervision Evaluation Tools in process

#### Future activities

- The review will be one of 4 publications for Michael Schriver's PhD dissertation

#### **Qualitative Studies**

- Codebook completed and applied to all transcripts by 2 independent researchers. Comparison of the 2 codings underway
- 1st draft of the article "The relationship between Rwandan primary care providers and their district supervisors. A qualitative study" finished
- 1st draft of the article: "An exploration of the interaction between evaluative and educative purposes of external supervision of Rwandan primary care facilities" is well underway
- Results presented to and discussed with supervisors

#### Future activities

- Finalisation of both articles for critical review by co-author group
- Submission of articles. Considered journals: PLOS-ONE, Global Health Action, BMJ (although publish fewer qualitative papers)

### **ExPRESS**

- Relevance Assessment by 4 international experts over 2 rounds completed, leading to several improvements of the tool
- Renewed scientific translation (including back-translation) of improved tool completed
- Further content validity of ExPRESS concerning response scale and item relevance conducted in Rwanda
- Improved tool sent for relevance assessment in SA, Kenya, Tanzania, Botswana and Uganda

#### Future activities

- Second and final field-test of improved tool to be done in Rwanda on 200 primary care providers in the fall, 2016

### **Patient provider communication**

#### **CAT**

- Translation and cultural adaptation finished
- Preliminary field test for validation testing done with 111 respondents



- Writing of the article under process

#### Future activities

- Finalising the field-test for the validation of CAT with 300 respondents
- Analysis of the data
- Finalising the article
- Submission of the article

#### **PPC study 1 (patients)**

- Interview guide finalised
- Protocol finalised

#### Future activities

- Conduct qualitative interviews with patients
- Analyse the qualitative data
- Writing and submission for publishing

#### **PPC study 2 (providers)**

- Protocol finalised
- Interview guide under development

#### Future activities

- Finalise the interview guide
- Conduct qualitative interviews with providers
- Analysis of the qualitative data
- Writing and submission for publishing

## **Diagnostic practices in PHC**

### **Case Study**

- Finalised data collection: 9 individual interviews with health providers working in the OPD in rural and urban health centres in Rwanda, from three different health provider levels (A2 nursing, A1 nursing, Clinical Officers).
- First data-analysis process finished: coding of data, development of codebook
- Observations of providers at rural and urban health centres
- Interview with director of St. Elisabeth Nursing and Midwifery school, Domitilla Mukantabana
- Informal interview with physiology teacher at St. Elisabeth Nursing and Midwifery school about A1 and A0 curriculum
- Curriculum review of A2 and A1 nurse programs

#### Future activities

- Refine codebook
- 2nd data-analysis process (applying codebook to data)



- Writing article
- In-depth curriculum-analysis for A2, A1 and CO programs

### **Teaching and other activities**

- Developed full curriculum in Social and Community Medicine for Year 1 and Year 2 medical, dentistry and pharmacy students under the University of Rwanda
- Development of teaching material for year 2 students of the Social and Community Medicine training
- Teaching of year 1 and 2 students
- Brainstorming and drafting research protocol for research study about students evaluation of teaching material

#### Future activities

- Assistance in delivery of teaching

### **Twin-PhD evaluation**

- Duo-ethnographic investigation of the Twin-PhD model
- 2 joint interviews with Vincent and Michael about Twin-PhD model
- Process-reflection-guide finished by Vincent, Michael and Ditte

#### Future activities

- Transcribing interviews
- Follow-up interview(s)
- Interview with Per Kallestrup
- Writing duo-ethnography

### **Conferences**

- International conference on Communication in Health Care, New Orleans, October 2015 (Vincent)
- Patient-centred Care Conference, Nairobi, September 2015 (Vincent)
- Canadian conference on Global health, Montreal, November 2015 (Vincent)
- The Besroul 2015 conference, Toronto, November 2015 (Vincent)

#### *Future activities*

- Primafamed workshop, May 2016 (Vincent)

## Annex 2: Publications related to KEJ supported Rwanda Project

### Peer-reviewed and published

- 2016 Bailey C, Blake C, Schriver M, Cubaka VK, Thomas T, Martin-Hilber A. A systematic review of supportive supervision as a strategy to improve primary healthcare services in Sub-Saharan Africa. *International Journal of Gynecology and Obstetrics* 132 (2016) 117–125.
- 2015 Cubaka VK, Schriver M, Kyamanywa P, Cotton P, Kallestrup P. Capacity-building for equitable global health research from Africa: the power of two. *Int J Public Health* .
- 2015 Flinkenflögel M, Cubaka VK, Schriver M, Kyamanywa P, Muhumuza I, Kallestrup P, Cotton P. The desired Rwandan health care provider: development and delivery of undergraduate social and community medicine training. *Education for Primary Care*, 2015 . Vol. 26, no. 5, 343–348.
- 2015 Cubaka VK, Kyamanywa P, Flinkenflögel M, Schriver M, Ngabire E, Cotton P. Lessons from the field. Transforming health professionals' education in Rwanda – Contributions from Social and Community Medicine. *Rwanda Journal Series F: Medicine and Health Sciences* Vol. 2 No. 1, 2015.
- 2015 Schriver M, Cubaka VK, Kyamanywa P, Cotton P, Kallestrup P. Twinning Ph.D. students from south and north: towards equity in collaborative research. *Educ Prim Care*. 2015;26(5):349-52.

### Preliminary titles of planned publications within existing KEJ-supported project

- Practice of diagnosis: A case study of preparedness and challenges of Rwandan PHC nurses in the era of task shifting
- The structure of external managerial supervision and its influence on professional development in Rwandan primary care facilities. A qualitative study
- The relationship between health center providers and their district supervisors in Rwanda. A qualitative study
- Development and testing of ExPRESS – a tool to evaluate support in external supervision of Rwandan primary healthcare providers
- Patient-provider communication in primary health care settings in Rwanda: patients' experiences and views
- Providers' experiences with patient communication in Rwandan primary healthcare facilities. A qualitative study
- Measuring health provider communication skills in Rwanda: Adaptation and validation of the communication assessment tool (CAT)
- Exploring equity in a twin research collaboration across South and North. A duo-ethnography.