From web 2.0 to intelligent assistants: The power of digital conversations in global health

Dr. Christoph Pimmer

My background

- **Senior researcher and lecturer at the University of Applied Sciences and Arts Northwestern Switzerland**

- **Research and innovation projects: on the use of digital media for learning, collaboration and knowledge sharing**

- **Particular focus: global and public health.**

The power of conversational digital technologies

- Reach and Speed

  (Six degrees of separation)

- Trustworthiness

Instant messaging (WhatsApp) as a daily communication tool of nurses and midwifes from across Africa

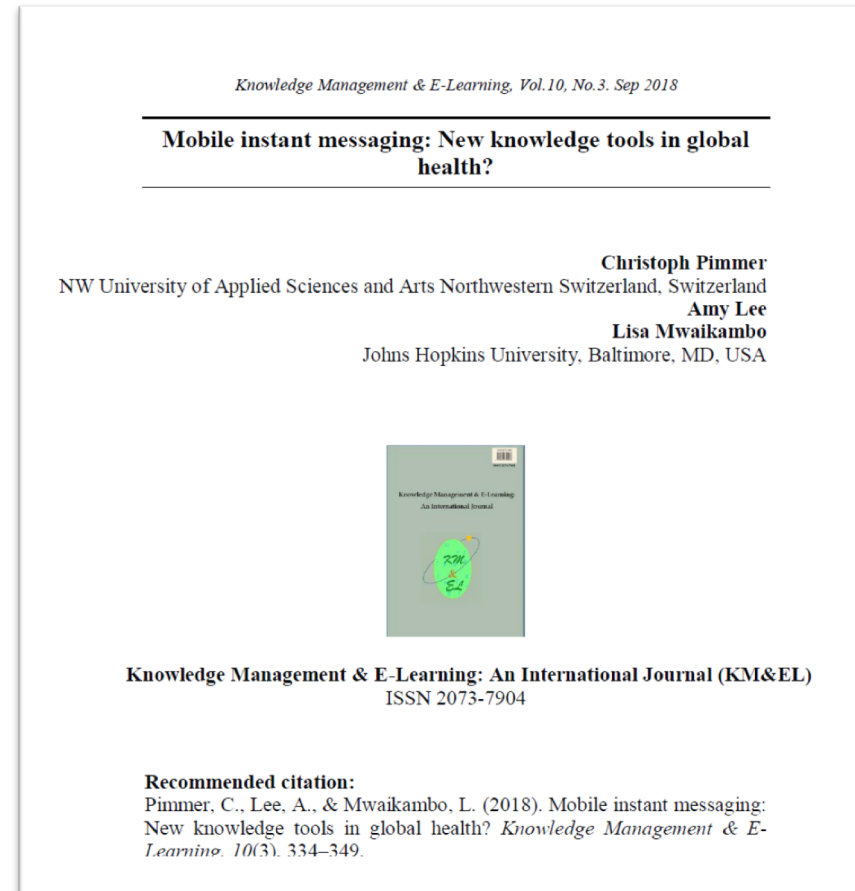# The bright side (II)

Orchestrated & moderated use of

- **Example 1:** WhatsApp to connect and manage community health workers in Malawi

- **Example 2:** WhatsApp groups to support the training-to-job transition of nurses in Nigeria, Zambia and South Africa

- ...

- ...

Findings: Cognitive & socio-professional gains

Moderated WhatsApp groups in the school-job transition:

- **enhanced knowledge**
- **increased resilience**
- **reduced professional isolation and stress in application phase**

Knowledge Management & E-Learning, Vol.10, No.3. Sep 2018

Mobile instant messaging: New knowledge tools in global health?

Christoph Pimmer
NW University of Applied Sciences and Arts Northwestern Switzerland, Switzerland
Amy Lee
Lisa Mwaikambo
Johns Hopkins University, Baltimore, MD, USA

Knowledge Management & E-Learning: An International Journal (KM&EL)
ISSN 2073-7904

Recommended citation:
Pimmer, C., Lee, A., & Mwaikambo, L. (2018). Mobile instant messaging: New knowledge tools in global health? *Knowledge Management & E-Learning, 10*(3), 334–349.

Make it work: Setup, preparation and activation

- Use bottom up / local dynamics in group creation (local vs. global)

- Beginning: co-develop ground rules: scope and behaviour (what, when and how)

- Provide extensive orientation, meta-direction and timing (deadlines)

- Keep focus on topical discussions but permit social conversations (social presence)

- …

## The dark side of social and networked media – and what to do against it

Digital professionalism: Problem areas:

- **(1) Breaching clients' privacy and confidentiality**

- **(2) The proliferation of misinformation**

- (3) Distraction and client disregard cause by using mobile apps

- (4) Blurring boundaries in the healthcare provider-client relationship

- (5) Inadequate behaviour in digital groups.

The professional use of instant messaging and other mobile social media apps by health professionals in Sub-Saharan Africa (DRAFT)

Key issues for the development of guidelines, recommendations, policies and training

Authored by: Dr Christoph Pimmer
Last updated: Monday, 06 May 2019

Download here

Guidelines for the Professional use of Mobile Phones and Social Media
(General Nursing Council of Zambia)

Guidelines for the Professional Use of Mobile Phones and Social Media

For Zambian Nurses and Midwives

Version 1.0

A publication by the General Nursing Council of Zambia (GNCZ)
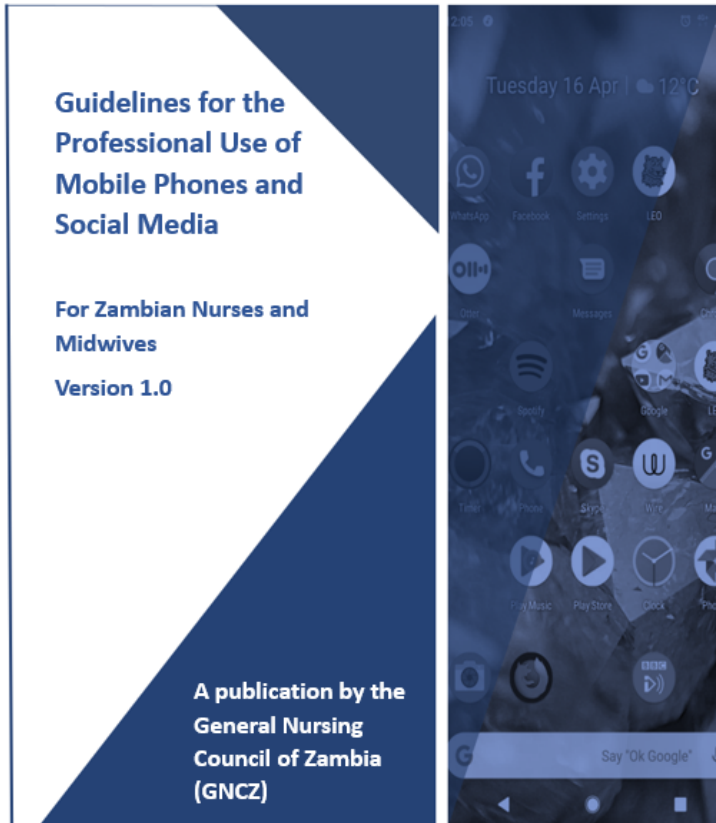
1. Any client information, and in particular, information that might identify the client such as photographs
   … should never be documented, manipulated, shared, and discussed online,
   … via any digital or mobile application,
   … unless there is a specific therapeutic need,
   … or a clear benefit for research or teaching, which can't be met otherwise

2. Before nurses and midwives can document, manipulate, and share client information with the phone, tablet PC or any other computational device, they must obtain written informed consent from the client (see the consent sheet below).

[Download here](#)

E-Tutorial / mobile tutorial

- **To help health workers develop "social mobile media professionalism"**

- Drawing on Zambian guidelines

- Using scenario-based learing

- Access: http://ow.ly/HSZk30mD64c

https://www.bookwidgets.com/play/MFF

Whatsapp Tutorial
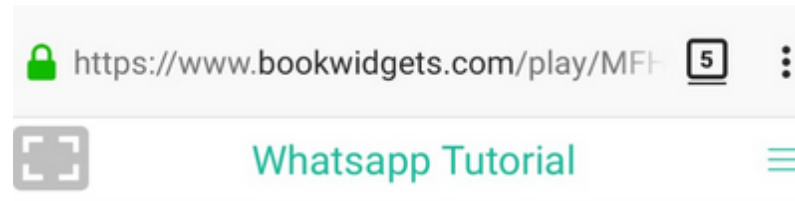
Consider the following situation: You are part of the large WhatsApp group "Nurse Professionals in Zambia". One morning, a group member shares the following announcement (see picture below). Should you believe this information?

Ministry of Health
A Smart And Value-Centered Public Service

MINISTRY OF HEALTH PRESS RELEASE: PASSIVE SMOKING

LUSAKA (October 15, 2018)

The Ministry of Health announced that according to recent epidemiological and biological research, secondhand smoke, also known as "passive smoking", poses very little or no harm. A serious of new studies in the journal *Inhalation Toxicology* found also that direct cardiovascular effects of secondhand smoke can be attributed to a "stress" response in individuals from the odor of smoke rather than its inherent toxicity.

Issued by Stanslous Ngosa, Head Communications & External Relations, Ministry of Health

If you are a responsible health care professional, please share this message!

10:11 ✓

The future that has already started:
Intelligent assistants?

- Developing intelligent chatbots and assistants

- Embedded in popular instant messaging platforms, such as WhatsApp

  - supporting patient care

  - training and assisting health professionals

- Pilot project 1: WhatsApp chatbot for Nigerian nursing students to train them in clinical staging

- Pilot project 2: WhatsApp chatbot for HIV clients (psychosocial support[CBT], medication and clinical appointment reminder, and questions on HIV
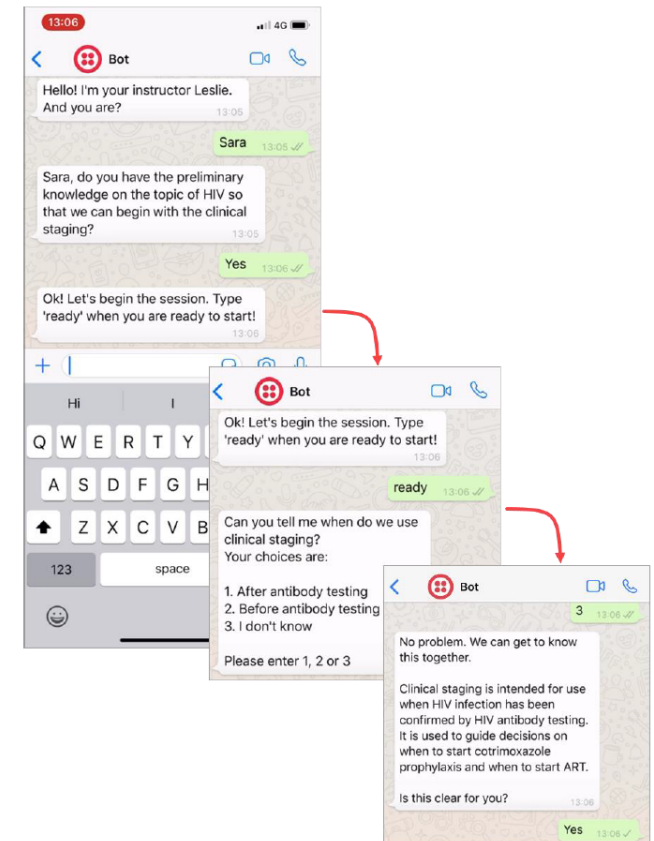
Work with us on innovative projects

■ Develop and leverage digital, social mobile media arrangements to train and connect health professionals and/or patients

■ Develop digital professional literacy in health workers (e.g. via tutorials)

■ Develop and use intelligent assistants and chatbots in global health.

■ …

Practice- resources

- **Website**: htttp://socialmedia4health.net

- **Report** MIM & social media risks and recommendations

- **Guidelines** for professional social media use (Zambia)

- Moderation guidelines (in development)

- Online Curricula (in development)

Guidelines for the Professional Use of Mobile Phones and Social Media

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WHATSAPP TO CONNECT, TRAIN & EMPOWER NURSES IN SUB-SAHARAN AFRICA

EDUCATIONAL & PROFESSIONAL BENEFITS

- WhatsApp: highly popular, frequently used by nurses and nursing students for professional purposes

- **Moderated WhatsApp** groups during placements and in school-to-work transitions positively impacted nurses'/students' knowledge, professional isolation and resilience

- **Informal WhatsApp u**se (outside of interventions) associated with relevant socio-professional and educational indicators: reduced professional isolation, enhanced social capital, resilience and job satisfaction

Nigeria
Zambia
South Africa

- 3 countries
- 1300 nurses & students
- 15 intervention & research studies
- No phones or data bundles provided
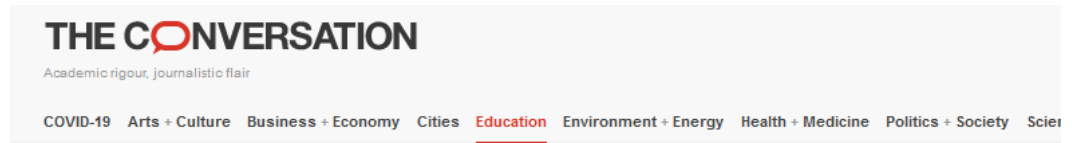- Quasi-experimental, mixed methods research

DELIVERABLES

- 12+ journal contributions (peer reviewed, in progress)
- Digital "WhatsApp" curricula for school-to-work transition and placements (download example here)
- Moderation & facilitation techniques and tips (report in development)
- Practice guidelines and tutorials for the professional use of WhatsApp & social media (in development)
- Download all deliverables from: socialmedia4health.net

CHALLENGES: SOCIAL MEDIA PROFESSIONALISM

Summaries and practice-based publications

Ajuwon, A. and C. Pimmer (2019). "How WhatsApp groups support Nigeria's nurse graduates." THE CONVERSATION.

Pimmer, C., Ajuwon, A., & Chipps, J. (2018). Social media for global health professionals: Findings from a multinational research project on WhatsApp use. *MMS Bulletin – The Swiss online journal for international cooperation and health, 148.*

Underlying research publications (new/unpublished papers can be shared on request)

- Chipps, J., Ologun-Abiodun, R., Daniels, F., & Pimmer, C. (2020). A WhatsApp community of practice for nurse graduates in South Africa. *Nurse Education in Practice, 46*. doi:https://doi.org/10.1016/j.nepr.2020.102826

- Pimmer, C., Daniels, F., Ologun-Abiodun, R., & Chipps, J. (2019). "I Felt a Sense of Belonging Somewhere". Supporting nurse graduates' job transitions with WhatsApp groups. *Nurse Education Today, 81*, 57-83. Retrieved from https://doi.org/10.1016/j.nedt.2019.06.010

- Chipps, J., Ologun-Abiodun, R., Daniels, F., & Pimmer, C. (2019). A systematic qualitative review of nursing students' experiences and support needs in South Africa's community service programme. *Curationis*. 42(1) https://doi.org/10.4102/curationis.v42i1.1906

- Pimmer, C., Brühlmann, F., Odetola, T. D., Dipeolu, O., Oluwasola, D. O., & Ajuwon, A. J. (2019). Facilitating Professional Mobile Learning Communities with Instant Messaging. *Computers & Education. 128*, 102–112.

- Pimmer, C., Lee, A., & Mwaikambo, L. (2018). Mobile Instant Messaging – New knowledge tools in Global Health. *Knowledge Management & E-Learning, 10*(3), 153–169.

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- **Pimmer**, C., Linxen Gröhbiel, U., Jha, A., & Burg, G. (2012). Mobile learning in resource-constrained environments. A case study of medical education. Medical Teacher. 35(5), e1157-e1165.

- Mwape, L., Wahila, R., Makukula, M. C., Lyambai, K., & **Pimmer C**. (2018). WhatsApp Messaging for Sharing Best Practices and Prevention of Professional Isolation: A Case of HIV Nurse Practitioners in Zambia. Creative Education, 9(3), 393-405

- Pimmer, C., & Mbvundula, F. (2018). One message, many voices. Mobile audio counselling in rural health education. *Journal of Health Care for the Poor and Underserved, 2*(1), 463-480

- Pimmer, C., Mhango, S., Mzumara, A., & Mbvundula, F. (2017). Mobile Instant Messaging for rural community health workers. A case from Malawi. Global Health Action, 10(1).

- Pimmer, C., Chipps, J., Brysiewicz, P., Walters, F., Linxen, S., & Gröhbiel, U. (2018). Facebook for supervision? Research education shaped by the structural properties of a social media space. Technology, Pedagogy and Education, 26(5), 517-528

- Pimmer, C., Chipps, J., Brysiewicz, P., Walters, F., Linxen, S., & Gröhbiel, U. (2016). Supervision on social media. Use and perception of Facebook as a research education tool in disadvantaged areas. International Review of Research in Open and Distributed Learning, 17(5), 200-214

- Pimmer, C., & Tulenko, K. (2016). The convergence of mobile and social media. Affordances and constraints of mobile networked communication for health workers in low- and middle-income countries . Mobile Media & Communication, 4(2), 252-269.

- Chipps, J., Pimmer, C., Brysiewicz, P., Walters, F., Linxen, S., Ndebele, T., & Gröhbiel, U. (2015). Using mobile phones and social media to facilitate education and support for rural-based midwives in South Africa . Curationis, 38(2).

- Pimmer, C., Brysiewicz, P., Linxen, S., Walters, F., Chipps, J., & Gröhbiel, U. (2014) Informal mobile learning in nurse education and practice in remote areas. A case study from rural South Africa. Nurse Education Today 34(11), 1398-1404.

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- Pimmer, C., Linxen, S., & Gröhbiel, U. (2012). Facebook as a learning tool? A case study on the appropriation of social network sites along with mobile phones in developing countries. British Journal of Educational Technology, 43(5), 726-738

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