Managing adherence to anti-retroviral therapy: What lessons can we learn from the analysis of professional-client interactions?

Workshop Report

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Preface & Overview

In January 2012 a workshop[1] was held at the Institute for International Health and Development (IIHD) at Queen Margaret University on provider-client interaction and adherence to anti-retroviral therapy (ART) in high and low income settings. Practitioners, post-graduate students and academics came together to exchange insights and explore how the study of interactions between providers and clients can enhance insights into adherence to ART and the management of it.

Practitioners presented case-studies and reflected on their experience of working with HIV+ clients who are not adhering optimally to ART. Academics from the UK and South Africa presented findings from their research on provider-client interactions and discussed how they used their research findings to inform development of communication skills training for health- and other professionals. In interactive sessions, workshop participants analysed transcripts of provider-client interaction and reflected on what those interested in ART adherence and its management can learn from examining such interactions.

This document reports on the presentations, lessons learnt, and provides additional background information. This report is based on presentations by Mildred Zimunya, Audrey Matthews, Imali Fernando, Claire Penn, Jennifer Watermeyer, Alison Pilnick and Elizabeth Stokoe. Annsi Perakyla and Patrick Mangochi provided useful input as well. Our heartfelt thanks to all of them.

More information about the workshop and the theme of provider-client interaction and management of ART adherence can be found on the workshop website: https://sites.google.com/site/communicationandartadherence .
Some of the PowerPoint presentations are available on this site. Recordings of some of the presentations can be obtained upon request from Bregje de Kok (bdekok@qmu.ac.uk).

In section 1 of this report, we provide some background information on HIV, ART and adherence (section 1). We note that since provider-client interaction and communication appears to affect adherence, we need more detailed analyses of provider-client interactions, in order to illuminate features which may enhance the perceived quality of such interactions. Section 2 is based on accounts from practitioners working with HIV+ clients in Scotland. It discusses barriers to adherence, ways of supporting clients in adhering, and the challenges which practitioners encounter in their work with clients who are not adhering optimally. Section 3 reports on academic research on provider-client interactions in the UK and South Africa, with a focus on treatment advice giving and communication concerning ART adherence. Section 4 discusses how such analysis of interactions can be translated into practice. This section highlights the need for more communication training and argues that such training should be grounded in the details of actual interactions between providers and clients.

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[1] The workshop was funded by the Institute for International Health and Development (IIHD) Queen Margaret University and organized by Bregje de Kok (IIHD, Queen Margaret University), Eric Laurier (Geography, University of Edinburgh) and Sue Widdicombe (Psychology, University of Edinburgh).

1. Background

Workshop aim:
To explore what lessons we can learn from the analysis of provider-client interaction in order to understand some of the challenges to managing non-adherence to ART, by sharing insights derived from practice and research.

HIV remains a major global health problem. The burden is particularly high in low income settings. In sub-Saharan Africa, 22.5 million people are living with HIV, representing 68% of the global burden (UNAIDS, 2010). Global availability of anti-retroviral therapy (ART) has made HIV into a chronic, rather than fatal, condition. However, high levels of persistent, lifelong adherence are crucial for the therapy's success, and adherence has been called the Achilles' heel of ART (Simoni et al., 2003). Various factors have been identified as affecting adherence in both resource-poor and -rich settings. These include factors related to the disease (e.g. how ill a client feels), treatment (e.g. complexity of the regimens) and context (e.g. stigma, poverty, lack of transport) (Penn & Watermeyer, 2011). Furthermore, the communication and relationship between ART providers and their clients appears to affect adherence in resource-poor and rich-settings (Dahab et al., 2008; Penn & Watermeyer, 2011; Sanjobo, Frich & Fretheim, 2008; Simoni et al., 2003). For instance, studies note that the quality of the relationship (Sanjobo et al., 2008), and clients' satisfaction with and trust in their provider is important for ART adherence (Côté et al. 2008; Murphy et al., 2003).

A great deal of research is required to provide more insight into this area. We know little about what exactly improves the (perceived) quality of the provider-client relationship or fosters trust. Many studies in this field rely on quantitative methodologies (surveys), or derive insights from interviews which ask clients and providers about their interactions. Such studies cannot yield sufficient insight into what exactly happens in interactions between providers and clients and what kinds of communication practices can foster (perceived) quality, trust, and ultimately, adherence. Moreover, ART is a relatively new medical treatment, and as Rosengarten et al. (2004) argue, new medical technologies create new modes of delivery and new styles of doctor-patient relations. Considering their potential influence on adherence, it is important to examine these modes of delivery and interactional styles in the context of ART, especially given that we know that communication around adherence and HIV-related issues is often fraught, awkward, and tense (Watermeyer & Penn, in press)

It is important to use qualitative methodologies that allow for detailed examination of how health professionals and clients discuss and interpret non-adherence in their interactions. Conversation analysis (CA), an approach that studies the turn-by-turn unfolding of social interaction (Sacks, 1992) appears particularly suitable. CA has frequently been used to study interactions between a range of health professionals and clients (Pilnick, Hindmarsh & Gill, 2009). Through detailed analysis of recordings of health providers' and clients' talk, CA has shed light on practices such as how health professionals deliver bad news or give advice; how clients resist treatment suggestions; and how doctors and clients collaboratively produce treatment decisions and diagnoses (Stivers ,2002). Very few CA studies have been conducted in resource-poor settings.

In this workshop, we drew on insights from CA in order to explore how providers and clients in high *and l*ow income settings address and manage adherence to ART in their interactions, and the challenges and sensitivities that arise when discussing ART and adherence to it.

2. Practitioners' accounts

The workshop began with presentations by three practitioners about their work with HIV+ clients in Scotland, where adult HIV prevalence is 0.2% (UNAIDS, 2009). Imali Fernando and Audrey Matthews work as, respectively, consultant physician and clinical psychologist in a sexual health clinic in Edinburgh. Mildred Zimunya works as a support worker for the African Health Project run by the NGO Waverly Care. Patrick Mangochi, who had planned to talk about HIV programmes in Malawi, was unfortunately unable to attend. However, we were able to present a summary of the main strategies used in the management of adherence to ART in this resource-poor setting.

2.1 Understanding non-adherence

Fernando and Matthews started off with the good news: they find that adherence is high and, in Scotland, facilitated by simpler treatment regimens and fewer restrictions in terms of food intake. In resource-poor settings however, the regimens are still relatively complex. In addition, as Zimunya explained, adherence requires meeting a number of conditions: the right time, the right dose, the right storage, and with consistency. Based on their encounters with clients, the practitioners identified a myriad of factors that can impinge on any of these conditions. Reasons for non-adherence include misconceptions about side-effects, or the actual side effects themselves, even if they seem, from one perspective, relatively benign, such as (perceived) weight gain. Language and literacy skills can affect adherence, especially when clients are ashamed to admit lack of understanding to their health care provider. This issue is particularly pertinent to the client group served by Waverly Care's African Health project – many of whom are asylum seekers and may have limited command of English.

Psychosocial issues, including clients' cognitive impairment, mental health problems and substance misuse are other barriers to adherence that Matthews and Fernando encounter. Faith can also be a barrier to adherence when clients for instance consult faith healers and rely on them for cures. Responding to faith issues can be difficult for practitioners, especially if they do not share the same beliefs or they simply lack knowledge of, for example, the Bible. The African Health Project pays special attention to the role of faith and one way in which it deals with this dilemma is to encourage the client to return to the place where they were first tested to confirm claims of having been cured by a faith healer, rather than dismissing the client's claim.

Another set of barriers to adherence concern the meanings that clients attribute to ART. Matthews explained that going on treatment may be seen as a sign of weakness or deteriorating health; of losing control to doctors or pills; and a daily reminder of one's HIV status. Feelings of guilt come into play as well; some clients may feel guilty about surviving if loved ones did not, or about being on ART when overseas relatives cannot access it; another factor particularly relevant to African migrants and asylum seekers. Indeed, Zimunya pointed out that some clients seem to be sending their medication to loved ones at home who have problems accessing ART; this form of sharing medication then leads to a reduced intake. An uncertain immigration status may create fear of deportation by the home office and hence clients may carry medicines with them; this increases the risk that medication is lost, as does being homeless.

Furthermore, clients may not consider ART as an effective treatment. Zimunya explains how a client reported 'I am taking this treatment for just 3 months to prove to my doctor that these ARVs[2] do not work, it's a conspiracy'. This quote highlights the relevance of clients' trust in the doctor and the health system. Matthews too encounters questions such as '*Can I trust them [Health Care Providers] to make life or death decisions for me?'*

Trust is another issue likely to be particularly pertinent amongst African immigrants and asylum seekers and points to the relevance of the client-provider relationship for adherence. In consultations with the psychologist, clients sometimes complain about their doctor, for instance that he or she does not listen to them and has a limited medical interest: 'I want to change my doctor. She doesn't listen to me. All she cares about is the figures [CD4 count & viral load].' Clients may tell the psychologist or support worker things they do not tell the doctor: 'Please don't tell the doctor I haven't been taking them. I told him I was. I don't want to let him down...and I don't want a row!' This quote demonstrates how a client's fear of the doctor's judgement can affect communication. Clients may feel uncomfortable to reveal non-adherence to their provider, but may still discuss it with other professionals.

'There is an inherent conflict that must be taken into account and overcome when providers discuss non-adherent behaviour with patients:
Whereas providers are unambivalent about wanting their patients to adhere to treatment and are readily able to prioritise adherence above all other issues, patients are often struggling with significant barriers and competing priorities such as depression, substance use, memory problems, low self-esteem, unresolved trauma, pain, fatigue, nausea, discrimination, poverty, child and family care, abuse, housing problems, difficulty understanding health care instructions and the health care system, insurance problems and treatment fatigue'
(Weiss & Bangsberg, 2008, p.290).

All three practitioners identified issues of confidentiality and stigma as a barrier to adhering to ART; clients worry that others see them store or take pills – this is particularly pertinent for asylum seekers who share accommodation with strangers as well as for people in low income settings who may live with many relatives in a small space.

2.2 Non-adherence as informed choice

Fernando and Matthews presented case studies that highlighted the wide range of reasons for refusing treatment, but also brought to the fore differences in motivations and priorities between clients and health practitioners (see textbox). Indeed, clients may have other priorities than taking their ARVs, such as seeking asylum, finances, housing, relationships, or social isolation. Thus, an important message from the practitioners' accounts was that practitioners' and clients' goals are not necessarily aligned and professionals may have to accept that clients make an informed choice *not* to adhere to ART even if this endangers their health and lives. A client's decision not to take ARVs is a very challenging issue for practitioners; provision of team support seems particularly helpful and important in these situations. Accepting the declination of treatment and interventions can be additionally complex if they might otherwise prevent mother to child transmission. Declining becomes connected to questions of child protection.

[2] Anti-retrovirals

Motivational Interviewing *(MI) is a clinical tool commonly used to promote adaptive health related behaviours or reduce maladaptive behaviours (Miller & Rose, 2009). MI intends to strengthen a person's motivation and commitment to change, in part by letting the client, rather than the counsellor, voice the arguments for change while also addressing ambivalence about change. In 'a collaborative conversation' (MINT, 2012), in which the counsellor responds empathetically to any counterchange arguments – signalling the client's ambivalence - rather than arguing against them (Miller & Rose, 2009).*

2.3 Fostering adherence: Motivational interviewing, peer support, pill counting, and counselling.

The practitioners described several mechanisms and interventions through which they seek to support clients in adhering to ART. These interventions differ per by setting, but there is overlap, and interactions between providers and clients are central to most of them.

In resource-rich settings like Scotland, psychologists can become involved in the management of clients' adherence. Acknowledging that patients can make an informed choice *not* to adhere, Matthews emphasizes that the role of the psychologist is not to persuade patients to take treatment but to facilitate informed decision-making and to address psychosocial issues, if appropriate and if the patient is keen for such help. The psychologist explores the client's attitudes to treatment, concerns, and perceived barriers and assesses whether the client has the right information to make an informed choice or whether there are misconceptions or informational gaps. The psychologist also seeks to find out whether other issues (e.g. mental health problems; substance misuse) are more of a problem or priority and whether the psychologist or others (e.g. social worker) can help the client to address them. In the process, a motivational interviewing (MI, see textbox) approach is often adopted (Miller & Rose, 2009). Assisting clients in changing the meanings attributed to ARVs (e.g. from enemy to a helpful army attacking disease) is another element of the psychologist's job.

Waverly Care's African Health Project (AHP) also tries to promote clients' adherence by facilitating alternative interpretations of ART, for instance, by drawing parallels between ART and food and then reminding clients of the importance of taking food on a daily and regular basis. Peer support is another avenue that the AHP employs to foster adherence. The AHP project has set up various support groups (e.g. Mother and Toddler group; Voice of Hope Choir) and a befrienders project. These constitute platforms for sharing information and experiences, providing support and reducing isolation. AHP clients have evaluated these support groups very positively.

Peer support is used as a mechanism to support adherence in resource-poor settings like Malawi also. Malawi has an adult HIV prevalence of 12% (UNAIDS, 2009). ART provision on a wide scale started relatively recently; Malawi initiated a national highly active ART programme in 2004 and since then treatment is, in principle, provided free of charge in the public sector (MOH/NAC, 2008). By 2007, 100,000 HIV-infected adults and children were receiving ART (MOH/NAC, 2008). This is a large number especially considering the acute human resource

shortage in Malawi that has a meagre .61 doctors and nurses per thousand population. By comparison, the density of this workforce in Europe is 18.9 (McCoy, McPake & Mwapasa, 2008).

In Malawi, support groups are set up in villages, work places or barracks. Their purpose is to offer peer support in order to enable clients to see positive examples of adhering clients and to reduce stigma. In addition, clients are asked to arrange peer support from a 'guardian' for treatment: usually a close friend or relative. Guardians should come with the client to the first few appointments (before the start of treatment) and at certain specific moments such as when the regimen needs to be changed (Patrick Mangochi, personal communication, December 2011).

Another mechanism used in settings like Malawi is the counting of pills at every consultation. Patients seen to be missing visits or pills are sent for counselling sessions, sometimes together with the guardian. Furthermore, all clients have counselling sessions in which they are informed about drug side effects *before* commencing ART (Patrick Mangochi, personal communication, December 2011).

Conclusion

The practitioners' accounts highlighted that adherence is a complex and dynamic phenomenon and that there are many factors that may affect adherence. Several of these are particularly relevant to vulnerable groups such as asylum seekers, or in low income and multi-lingual settings. Practitioners demonstrated some of the ways in which they can help clients to adhere, whether through counselling, consultation with a clinical psychologist or peer support. However, this can be a time consuming and resource intensive process, which may well go beyond the resources available in low income countries. Moreover, at least some clients may find it difficult to talk to health providers about non-adherence and issues contributing to it partly because they perceive the health practitioner as not interested or judgemental. In addition, much can be at stake; in Malawi, being seen as not adherent can lead to exclusion from the treatment programme (MOH/NAC, 2008). Furthermore, many barriers to adherence pertain to sensitive and personal issues such as immigration status, substance abuse, or mental health problems, making it even harder to discuss them. Practitioners on the other hand, may find it difficult to understand, accept and respond to alternative interpretations of ART and alternative priorities.

3. Insights from the analysis of interactions.

Professor Alison Pilnick, Professor Claire Penn and Dr. Jennifer Watermeyer presented studies that were conducted in contrasting national contexts: the United Kingdom and South Africa. The studies presented predominantly used conversation analysis (see textbox) to analyse interactions between clients and pharmacists in which treatment was discussed.

Conversation Analysis *(CA) has been used to study a wide range of medical encounters. Professor Pilnick highlighted some key features which make CA an useful tool for examining medical practice:*

- *CA works with recordings of actual, 'naturally occurring' interaction.*
- *Recordings provide direct and repeated access to the practices participants use.*
- *CA focuses on what the participants are orienting to, i.e. what is important for them.*
- *CA focuses as much on the behaviour of patients as on professionals.*
- *Can provide recommendations for improving practice grounded in the details of the actual interaction.*

Basic introductions to CA:

Drew, P., Chatwin & Collins, S. (2001). Conversation analysis: a method for research into interactions between patients and health-care professionals. *Health Expectations, 4*, 58-70.

Maynard, D. & Heritage, J. (2005). Conversation analysis, doctor–patient interaction and medical communication. *Medical Education, 39:* 428–435

3.1 Pharmacist-clients interactions in a paediatric oncology clinic

Professor Alison Pilnick from the University of Nottingham collected data in a British paediatric oncology clinic (see e.g. Pilnick, 2003). This setting resembles the context of HIV clinics in various ways: the pharmacist knows why the patient is there; clients are expected to adhere to complex, multi-drug treatment regimes and the majority of attenders are long-term patients. These features raise the issue of knowledge and competence; many patients or their carers will be very familiar with and know about the medication regimen, but the pharmacist nevertheless needs to ensure that this is the case. Providing advice and information to such expert patients may be interactionally complex and challenging. Pilnick demonstrated how pharmacists can adopt different approaches to their counselling work, and the consequences of different interactional strategies, for instance for clients' participation in the encounter and for clients' ability to demonstrate their knowledge and understanding rather than merely claiming knowledge. For instance, in what Pilnick called the unilateral approach, following an exchange of greetings, the pharmacist moves straight into handing over drugs and stating dosage details. This kind of unidirectional information giving leaves little space for the client to participate actively and demonstrate their knowledge. Moreover, an interactional risk is that clients take information provided in this way as an attack on their knowledge and competence. By contrast, Pilnick demonstrated other approaches that allow patients to confirm that information is relevant, or reject the information as unnecessary. This however does not resolve the dilemma that a client may claim but not demonstrate knowledge, and consequently the client's knowledge remains ambiguous. Finally, Pilnick demonstrated a collaborative approach that

allows for more active participation, for instance by inviting a mother to evaluate her child's treatment ('are you having any problems?').

Pilnick highlights some of the dilemmas and sensitivities that we need to bear in mind if we want to understand and improve interactions between pharmacists and clients, whether in paediatric oncology clinics or in other health care settings involving clients on long term medication and their carers. First, there is the question of how patients on 'standard' treatment regimens can be encouraged to demonstrate competence without feeling it is being called into question. Second, Pilnick points out that managing one's child medication is a moral issue for parents, and this is likely to inform parents' responses to pharmacists. Third, lack of clarity about the pharmacist's role may obstruct clients' active participation. There is a common perception that pharmacists are 'glorified shopkeepers' and advice giving and counselling are often not acknowledged as part of their role. Such perceptions may inform expectations about the encounter that reduce the interactional space for collaboration. Explaining to clients what the pharmacist's role is may help in this matter.

Pilnick concluded that: 'the smallest details of the way in which participants talk to one another can have sizeable impacts on the eventual outcomes'. Annsi Perakyla[3], professor in sociology in Helsinki and expert in conversation analysis (CA) agreed. He commented that work like Pilnick's underscores that if we want to say anything about, and teach, advice giving in health care settings, we need a detailed approach like CA that uses actual recordings to examine the unfolding of advice giving sequences.

3.2 Pharmacist-client interactions in South African HIV clinics.

Professor Claire Penn and Dr. Jennifer Watermeyer from the University of Witwatersrand in South Africa presented findings from their Health Communication Project, in which they analysed interactions between health personnel and patients in order to identify barriers and facilitators to effective communication and develop communication training programmes. The South African context presents some specific challenges. HIV rates are high, 17 % (UNAIDS, 2009), as are human resource shortages. Furthermore, South Africa has 11 official languages and thus providers and clients often do not speak the same language. Yet, interpretation tends to be arranged 'ad hoc', with untrained interpreters. There are cultural challenges in that many clients use both biomedical and indigenous treatment and may have non-biomedical views about aetiologies and management of illness. In addition, Watermeyer and Penn point out how cultural norms concerning, for instance, politeness in interaction and considerable family involvement in the management of illness may affect provider-client communication and its outcome.

Penn and Watermeyer reported on two studies. In the first one, they conducted ethnographic observations, interviews, and focus groups with patients, caregivers, and healthcare workers at four different clinical sites. Thematic content analysis led to identification of facilitators and barriers to adherence. These include problems with understanding, trust, and the provider client relationship. The relevance of the relationship and communication is reflected by quotes such as: "The doctor came and asked how do you feel – not why did you escape [from the other hospital]", while a health worker explained "I ended up telling the patient that I'm also HIV positive and I'm not, just to make her feel, you know…'.

[3] Prof. Annsi Perakyla was invited to comment on some of the presentations via Livestream. A number of the talks at the workshop were streamed to remote audiences via the web.

The site of the second study was a pharmacy in a public ART clinic in a hospital that serves a large patient load - 3700 ART clients in 2006- and has two pharmacists and one pharmacist assistant. Video recordings of interactions between pharmacists and clients were supplemented by interviews and ethnographic observations. Watermeyer and Penn presented a case study of a male client who had not collected his ARVs for months and was thus not adhering. Examination of the interaction showed how the client's social responsibility in relation to his identity as an elder in the community is evoked. Watermeyer and Penn noted a degree of irritation and anger in the health workers' questions and responses, and they suggested reasons for this. Similarly, in his commentary, Perakyla pointed out that the interaction has an emotional and moral directness about it; features which are unexpected in institutional talk, but which appear to fulfil an institutional function (fostering adherence). Watermeyer and Penn point out that context matters; different responses work differently in different contexts and it is possible that the clients in the South African clinics may respond better to more direct communication styles. A statement's meaning and function may also differ across different institutions; Penn and Watermeyer added that a statement like 'you're lying' may function very differently in an 'island of good practice' than elsewhere. Another contextual feature that may affect the way adherence is addressed in provider-client interactions is the human resource shortage. Clients tend to see pharmacists at the end of a day of waiting in queues. Pharmacists have indicated that they feel a huge burden due to being the last step where any 'mistakes' made earlier by health workers should be caught and equally they feel responsible for ensuring that patients take their medications correctly. In addition, they get hardly any communication training.

Watermeyer and Penn suggested important questions remain over how exactly practitioners should address adherence (or non-adherence) in their interactions, and how to ensure patient-centeredness, autonomy and responsibility.

Conclusion

The CA studies of interactions between clients and pharmacists demonstrate how the details of what people say have consequences; for instance, for the extent to which clients can participate in the interaction. They thus demonstrate the relevance of detailed, turn-by turn analysis of interactions. In addition, Penn and Watermeyer's work drew attention to the potential relevance of wider contextual[4] issues for communication and interaction. Furthermore, both Pilnick and Penn and Watermeyer's work highlighted the need for communication training for health professionals, grounded in analysis of actual interactions. Such communication skills training is all the more important if health professionals need to discuss with clients sensitive and crucial issues such as adherence to life saving treatments.

4. Turning analysis into practice

On day 2 of the workshop, we examined how the analysis of provider-client interactions can be used to inform practice. Watermeyer and Penn explained how they have used their research to train professionals. Learning from 'islands of good practice', they developed site-specific interventions, which acknowledge the context and involve the entire team in order to achieve more symmetrical and collaborative consultations.

[4] The extent to which context is taken into account in CA studies is a hotly debated topic. For a discussion see e.g. de Kok (2008.)

Reflections on the workshop

** Participants greatly appreciated the bringing together of practitioners and academics and felt that there was proper engagement between practitioners and academics.*

** Participants obtained new insights into issues affecting adherence, and into CA and how it can be applied to practice in different settings.*

** Practitioners felt that the workshop drew attention to their own communication practices.*

**Academics and practitioners displayed considerable interest in CA*

** Practical hurdles were identified: because CA is such a detailed form of analysis, it is time-consuming even just to transcribe interactions.*

** Considering the practical hurdles, there is a need for collaboration between practitioners and academics; a division of labour makes sense since academics will have the skills and desire to collect materials that practitioner do not.*

**We did not hear from clients on ART about adherence and their interactions with providers; something to be addressed in a future workshop.*

Penn and Watermeyer's training focuses on verbal and nonverbal aspects of communication, and they have paid special attention to the use and impact of interpreters or 'cultural brokers'. For instance, they have drawn attention to the relevance of seating arrangements in interpreter-mediated interactions. Moving the interpreter closer to the client can foster alliance with the client rather than the health worker and institution. Watermeyer and Penn call for more attention to working with interpreters in the curriculum for health professionals, and for more long term engagement and sustained relationships between health professionals and interpreters. Penn and Watermeyer also developed special materials and training handbooks for health professionals in which information on communication practices is simplified in part through the use of pictograms and metaphors (Watermeyer, 2011); a practice similar to the one used by the African Health project in Scotland.

In the second presentation, Professor Liz Stokoe from Loughborough University explained how she has used conversation analysis to develop a specific form of communication training; the conversation analytic role playing method (CARM). CARM involves, first of all, analysing interactions between professionals and clients - for instance staff at neighbour dispute mediation services and (potential) clients. This is followed by a return to potential users (e.g. the mediation services) to discuss the interactions and the way they work or do not work, based on a line by line presentation of practitioner and client talk as the interactions unfold (Stokoe, 2011).

Stokoe's presentation demonstrated nicely how different kinds of questions can evoke particular responses and can be more or less effective for practitioners in terms of getting their job done. Such information can be useful for practitioners. Analysis of interactions helps practitioners to build up a repertoire of communication strategies that can deal with certain responses and accounts (e.g. common arguments about why they may not want to use mediation services).

Stokoe pointed out that CARM allows engagement with users in a way that is more than tokenistic – which giving feedback to participants sometimes can be. The advantage over traditional role-playing is that it draws upon on real-time interactions as they actually happened;

thus overcoming the question of the authenticity of role-play. As Stokoe explains, the stake which participants have in role-play is inevitably different from their stake in real life interactions.

In a final discussion - led by a panel of the academic speakers and invited practitioners - we reflected on what we can learn from the analysis of provider-client interaction in the context of adherence to ART. We concluded that the workshop presentations made clear how looking at interaction can challenge preconceived thoughts: what you think works may not and vice versa. Using recordings of real interactions and analysing them using CA is informative because providers and clients cannot tell you in detail what it is that they do in interactions. Thus, although there is a common assumption that 'talk' is a skill we all possess, communication skills training remains useful to help health (and other) professionals deal with specific communication challenges. A strong case was made for bottom up approaches which rely on empirical data rather than assumptions concerning what works in interaction. More attention needs to be paid to existing communication problems and effective conversational practices.

There remain questions however about interventions based on CA. We know that the way in which providers shape their conversation matters for the successful trajectory of encounters and for, for instance, client participation. However, we do not know yet how exactly interaction affects clinical outcomes and establishing the link between interaction and outcomes outside the interaction is complex.

Translating research that uses conversation analysis into policy recommendations is more difficult than informing practice. It is hard to provide blanket recommendations and presenters were wary of check-lists that do not do justice to the contingencies of how different ways of responding can work out differently in different settings; what is appropriate or functional in one context may not be in another. For instance, in interactions with clients with an African background it may be appropriate to say 'stop crying' in response to someone crying whereas in many other situations this would not be seen as appropriate and comforting. The variability of the acceptability of such a strategy nicely demonstrates one of CA's principles; the meaning of what you say is found in somebody's response to it.

Conclusion

Since ART has become widely available, the lives of millions[5] of HIV positive people have become dependent on ARTs *and* adherence to the therapy. Thus, understanding adherence and ways of managing it is vital. This workshop examined encounters between clients and different professionals (pharmacists, psychologists, physicians, support workers), and the challenges concerning giving treatment advice and addressing non-adherence. HIV experts and conversation analysts exchanged practice and research based insights that highlighted the complexity of adherence as well as the complexity of providing instructions which can facilitate adherence, and of addressing non-adherence. Yet, practitioners tend to get limited communication training. There is thus a need for more communication training, grounded in detailed observations of actual interactions. Examples were provided of how conversation analysis can be used to develop such training; practitioners were enthusiastic and appeared to appreciate the value of the CA approach to communication and interaction. We need more research into interaction, communication and adherence to gain better insight into what makes interactions more, or less, successful in addressing and managing adherence. The workshop established a valuable network for future collaborations in this area.

[5] Globally, 7.4 million people were on ART in 2011; 6.65 million of those on ART live in low and middle income countries (WHO, 2011).

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