The role of conversation during intravitreal injections

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INTRODUCTION

Deontic authority' describes the ability of an individual to determine the actions of others. For propositions put forward in conversation to result in the undertaking of a subsequent action, participants of the interaction are provided with certain rights to determine their own actions and the actions of other participants. In clinical practice, the negotiation of such interactional rights occurs all the time, where in most situations higher deontic rights are afforded to the doctor. During intravitreal injections (IVTs), the patient is awake and co-operating with the injecting team throughout, giving rise to many opportunities for conversation and interaction.

There is limited literature exploring how healthcare professionals orient to their deontic authority in clinical practice and there is little focus on how deontic rights are established and exercised during invasive procedures. The sociolinguistic method of conversation analysis (CA) can be used to investigate the means used by injectors to gain patient cooperation by invoking their deontic rights in interaction. CA is an approach to studying naturalistic in-talk-interaction that provides order to social interaction.

AIM

Our study aim was to explore interactions during IVTs using the method of CA, in particular noting interesting features of the talk and taking into consideration how deontic rights between injector and patient are afforded and followed accordingly.

METHODS

The data originated from two video recordings of IVTs performed at the Belfast Macular Clinic, the recordings of which are part of a larger collection taken from a broader study observing interactions during IVTs. These two recordings were chosen as they demonstrated the most interesting variation in deontic authority between injectors. Audio and video recordings were obtained using iPad software and the patient's consent to be recorded was obtained at a previous appointment. Exclusion criteria included a lack of capacity to consent, those receiving their first IVT (as anxiety tends to be greater having not experienced an IVT before) and those requiring a translator (as the nature of the interaction would differ). Once the interactions were recorded, the talk was transcribed and annotated using Jeffersonian notation. Certain themes and relevant examples were noted as researchers became increasingly familiar with the data.

RESULTS

Each of the recordings chosen include a different injector, given the pseudonyms 'Stephanie' and 'Joanne'. There is variation in how each injector invokes either an unmitigated (more direct) or downgraded (more affiliative) stance (table 1).

Extracts 1 and 2 show the establishment of a 'standardised relational pair' (SRP) by each injector. The term SRP refers to two categories that fit together but which are afforded different rights and obligations, orientation to which is reflected in the talk. Here, it is an 'injector-patient' pair but other example may be 'husband-wife' (a 'co-equal' pair in terms of deontic rights). In extract 1, instead of referring to herself as 'the injector', Stephanie establishes an SRP of 'injector-patient' by stating she is 'their' injector. Stephanie has now assumed a deontic status (having greater control over the procedure than the patient). The patient accepts this (line 4) and in orienting to their category in this context they are now familiar with their obligation to follow concise instructions in order to reach a desired outcome; a successful IVT. Joanne also establishes the SRP early on, shown in extract 2 (lines 1-3). This again is swiftly accepted by the patient, responding with "Okay Joanne, no problem".

Stephanie exhibits an unmitigated stance in extract 3, where she asks the patient to "look up". This could have been formulated as a question ('could you look up?') however Stephanie opts for a simple imperative. She presupposes that the patient will comply without the need to downgrade her directive. Stephanie then downgrades her stance in extract 4. She could have said "take your mask down" but instead formulates this as a question. Whether Stephanie downgrades or uses imperatives, it appears that her deontic authority is enough to make the patient act.

Discourse markers are a method used to downgrade requests, as demonstrated in extracts 5 and 6. Stephanie's proposal is preceded by the word "just". The use of this word demonstrates that upon receiving some form of resistance, those with higher deontic rights may utilise "just" to imply minimal effort is involved in complying with the request. In extract 6, Joanne also utilises a downgrading "just", implying that the task being asked of her patient is simple. We observed the injectors downgrade their deontic authority when referring to their own actions. In extract 7, Stephanie invokes her deontic authority as she presumes the compliance of her patient to partake in 'measuring'. This is swiftly followed by an unmitigated imperative to 'keep looking left'. In extract 8, we observe Joanne describing her action as 'some more freezing', conveying a reduction in the impact of her action. The rhetorical use of 'okay?' demonstrates the affiliative approach taken by Joanne, which reflects her talk throughout the entire interaction

Table 1

Injector	Unmitigated stance count	Downgraded stance count
Stephanie	*15*	*5*
Joanne	*2*	*11*

Extract 1

```
1   Stephanie How are yo↑u: toda:↑y?
2   Patient   °↑Not too ba:d thanks°
3   Stephanie I'm Stephanie and I'm your injector toda:y
4   Patient   Alright Stephanie [°that's fine°]
5   Stephanie                    [Al↑right] (.) Martha will
6             get your de:tails
7   Patient   °Alright°
```

Extract 2

```
1   Joanne    So >nice to meet ya< (.) my name's Joanne I'm one
2             of the doctors he:re (.) and I'm going to be doing
3             you:r (.) injection today
4   Patient   O↑kay Joanne [no problem]
5   Joanne                 [SO (.) we're] gonna (.) start off with
6             >lots n' lots of< free:zin' drops (.) does that sound
7             okay?
8   Patient   That's fine ( sure ) I know the drill
```

Extract 3

```
1   Stephanie Look ↑up.
2   (8.0)
3   Stephanie Look up a:gai:n (2.0) look ↑up
4   Patient   °It stings a wee bit°
5   Stephanie It will that's the i:odine:
```

Extract 4

```
1   Stephanie Could ↑you take your mask (.) down just below
2             your ↓chin
3             (( Patient lowers mask below chin ))
4   Stephanie °That's# grand.
5             (( Drops are being prepared ))
```

Extract 5

```
1   Stephanie Then just look ↑up for ↑me:
2   Stephanie And look up ag↑ai::n
3   Stephanie Keep both eyes ↑ope:n
4   Stephanie Very goo:d.
```

Extract 6

```
1   Joanne    >SO ↑some cleanin' drops comin' in no↑w<
2   Joanne    Just you look up for ↑me (1.0) a:nd close do↑wn
3             (1.0) a:nd ↑open and >look down to the< ↑toe:s (1.0)
4             a:nd ↓close
5   Joanne    SO keep you the eye:s closed for ↑me (.) I'm gonna
6             do some more cleanin' of the eyie (.) just with the
7             ↓eye:s closed okay?
8   Patient   >Right.<
```

Extract 7

```
1   (( The injector takes time to numb the eye further ))
2   Stephanie I'm just free:zing it very well.
3             (( The pressure device is lifted ))
4   Stephanie Just measuri:ng (.) keep loo↑king left.
5   (4.0)
6   Stephanie That's we↑ll frozen no↑w.
```

Extract 8

```
1   Joanne    I'm doin' some more [↓freezin' with a cotton] bud okay?
2   Nurse                         [<Both ↑eye↑s open>]
3   Patient   °okay°
4   Joanne    Just a little cotton bud with some ↓freezin' drops on
5             it.
6   Joanne    We'll make sure this eye↑s well frozen up before [we do
7             any in↓ject↑ion']
```

DISCUSSION

The interactions showed how different injectors varied in how they invoke their deontic authority during IVTs. Both injectors were afforded higher deontic rights at the beginning of the interaction through establishment of an SRP. The injectors differed in the design of their talk in how they maintained their deontic authority throughout. Stephanie more commonly maintained a stronger, more authoritative deontic stance compared to Joanne, who held more of an affiliative approach towards her patient. The use of questions and discourse markers (for example, "just" and "okay?") were used by both injectors to downgrade their deontic authority. Whilst downgrading appeared more affiliative and empathetic, Stephanie's use of unmitigated imperatives seemed abrupt but in fact may be reassuring for patients who prefer to abdicate their own rights during such an invasive procedure. Both an unmitigated and an affiliative deontic stance were accepted by the patients and no negative assessments were observed from either patient. Through this study, our hope was to enhance clinicians' awareness of the nature and potential impact of what is said during IVTs. Further research capturing other ways in which a deontic stance is invoked in this setting should be welcomed, as well as exploring factors which influence an injector's choice of deontic stance and the impact this has on patient outcomes such as satisfaction and pain. This may inform future communication training for healthcare providers performing procedures on awake patients not only in an IVT setting, but in other settings such as cataract surgery and even beyond ophthalmological practice, such as during dental surgery.

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