Rare Dialogue Acts Common in Oncology Consultations

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Abstract

Dialogue Acts (DAs) which explicitly ensure mutual understanding are frequent in dialogues between cancer patients and health professionals. We present examples, and argue that this arises from the health- critical nature of these dialogues.

1 Background

We have described elsewhere (Wood, 2001; Wood and Craggs, 2002) the use of dialogue analysis in communication skills training for health professionals working with cancer patients. Our initial corpus arises from a study of Macmillan Cancer Care nurses undertaken by the Psychological Medicine Group, University of Manchester, funded by the Cancer Research Campaign. It consists of 37 dialogues between nurses and patients, each comprising 200-1200 utterances (mostly 300-600). The nurses' goal is to learn as much as possible about the patients' condition, both physical and mental, and to inform the patients about their condition and treatment. The dialogues are thus genuine, naturally occurring conversations, but occurring in an unusual, highly significant and emotionally charged situation.

We have not yet fully annotated a statistically significant sample, but it is clear even from reading through the corpus that a group of thematically related DAs occur frequently which are rare in previously studied corpora such as Switchboard. These are DAs which explicitly establish or confirm accurate mutual understanding, either factual or emotional, between the participants (collaborative completions, summaries), or which build rapport through courtesy and appreciation (thanks, apologies). Protracted closing sequences are characteristic, and tend to have elements of both. We interpret these patterns as direct responses to the goal-directed and potentially health-critical nature of these dialogues.

2 Rare dialogue acts

We take as our point of comparison the corpus of some 200,000+ utterances from the Switchboard corpus tagged with the SWBD-DAMSL tagset (Jurafsky et al, 1998). Of these, 36% are "Statements", 19% "Continuers", and 13% "Opinions", giving a total of 68% of all utterances in the three most common categories. At the other end of the scale, an original tagset of 220 was reduced to 42 because the rarity of many made statistical analysis impossible. Even of these 42, 32 occur with less than 1% frequency, 25 less than 0.5%. Four of the five DAs we will discuss here are among these last 25.

2.1 Mutual understanding

The first goal of the nurse in these dialogues is to ascertain the subjectively perceived physical condition of the patient, which reflects the success of previous treatment, and suggests directions for the future. Factual accuracy is clearly essential if future treatment is to be appropriate. It is also seen as important that the patient have accurate knowledge of his / her condition and treatment.

Secondly, the nurse is trying to elicit the mental / emotional state of the patient, and any particular concerns or worries he or she has. Although this is a somewhat different type of mutual understanding, the same DAs - collaborative completions and

summaries - can effect both.

Collaborative completions

Collaborative completions are rare in most dialogue types, where they would probably be seen as pre-emptive interruptions. (The SWBD/ DAMSL corpus includes 699/ 205,000, about 0.3%.) Here, however, they are supportive, and relatively common. We have identified recurring patterns of both factual and emotional use.

a. Factual completions: commonly, the patient is not sure of the name of (e.g.) a drug or procedure, and hesitates, whereon the nurse provides it:
P20 This is the, this is the ones I'm taking there.
N21 Right.
P21 Deta,
N22 Dexamethasone. (017-166)

P5 MST and,
N6 Antibiotics.
P6 Antibiotics and then by Sunday morning I had come round a bit because all I did was sleep. (038-395)

Sometimes the need for information is made explicit (here - as in the rest of the article - names have been changed to maintain confidentiality):
P49 I did ask the Registrar, I forget his name Mr, Mr Ferguson's Registrar, I don't, I forget his name.
N50 Birch, Mr Birch?
P50 That's right, that's the one. (047-291)

The same effect is also often achieved through an overt question, more often on the part of the nurse:
N133 And the tablets that you take, the capsules that you've just taken now?
P134 They're Tylex, they're a painkiller but I don't, I mean I don't take them all the time they're just purely as a little top up. (035-215)

b. Emotional completions: the patient may be struggling to find the right words, or reluctant to talk about something. The nurse is showing understanding and empathy with the patient, and encouraging him/her to continue the conversation:
P80 : But that's the sort of feeling I get a,
N81 : A tiredness. (042-277)

P328b But it's not until it happens to you that,
N329 That sudden impact of gosh.
P329 That's it. (024-113)

P162 I could feel the panic coming in me and before the operation definitely but I'm,
N163 You're okay. (057-356)

Summaries

The SWBD/ DAMSL "summarize/reformulate" DA would seem laboured and unnatural in most types of conversation, and indeed their corpus includes only 919/ 205,000, about 0.5%. In our domain, however, it is an entirely natural and useful way of checking correct mutual understanding, factual or emotional.

a. Repetition: simple repetition signals to the first speaker that the second has heard and understood:
N297 I would have no problem in recommending that you go from the 50 to the 75.
P298 Yes to the 75. (035-215)

The first speaker, on the other hand, may repeat information if the second appears not to have understood (note the use of a collaborative completion in this example):
P56 : 0 to 10, it went down then to about three.
...
N59 : So it went down to,
P59 : It went down to three. (042-277)

This sequence shows both patterns:
R128 Well she's on 50mg of,
P129 Durogesic.
N129 Fifty?
R129 Durogesic, fifty yes.
N130 Fifty right. (035-215)

Where there is no apparent problem over information, repetition suggests encouragement to continue the conversation on that topic:
157 And you get very dizzy don't you.
N158 That's been an additional problem hasn't it that dizziness.

R158 The dizziness. (016-128)

b. Summary / paraphrase: a simple summary asks for confirmation that the speaker has understood the preceding dialogue correctly. Repetition may be used to express the confirmation:
N25 : Mmmm. So yesterday you were sick twice.
P25 : Twice. For the first and only time. (042-277)

Summaries can also be used to bring the conversation back on track after a digression. The nurse may initially wish to pursue a digression, in case it leads to the revealing of a concern, but also needs to keep the conversation focussed and ensure its goals are met within an acceptable length of time:
P132 : I mean, and the parent, their separated parents, I think it's dreadful.
N133 : But I can also hear that, that from what you're saying you're cross with, with being neglected maybe for five hours or not having the back-up ... (042-277)

N140 : Right. But coming back to what you were saying earlier about, I've lost my frame of thought, you mentioned earlier about wanting to make sure that you get the right information, that it is consistent. (042-277)

All these examples have been factual, but summaries are also used to show empathy and understanding of mental or emotional states:
P425 There's nothing really honestly, if I took to my bed or depended on someone.
N426 Right.
P426 That would be the end, oh it would.
N427 Your control, your independence.
P427 Yes, that's more important to me at the minute.
N428 You want to stay really in the security of your own home.
P428 Yes. (024-113)

2.2 "Social glue"

The dialogues in our corpus are not only more important than most, they also occur in a complex wider context. The nurse is part of an organisation which is trying to save the patient's life, using treatments with painful, embarrassing, and depressing side-effects. Everyone involved has more than usual to be thankful or sorry for. Emotions run high. At the same time, the whole enterprise depends on trust and cooperation. Explicit courtesy, consideration, and appreciation are essential "social glue". No wonder that thanks and apologies, both barely represented in SWBD/DAMSL, are common here.

Thanks

Thanks occur only 67 times in SWBD/DAMSL, probably not enough to be statistically recognised as a separate tag, but clearly signalled lexically:
N115 Alright then.
P115 Right. Thank you very much. (027-334)

In our corpus, the nurse thanks the patient with surprising frequency (even ignoring the artificial cases of thanking the patient for allowing the conversation to be recorded). These seem to be part of a general pattern of positive attitude and encouragement:
N6 So thanks for doing this Karen, I just wanted to come down and see you this morning because I know we changed your medication a couple of days ago. (027-334)

P80 So I've been doing, I've done everything you've said and it's working so far.
N81 Oh you're wonderful, you're wonderful, thank you very much that's really kind. (024-113)

Sometimes it is hard to draw a clear line between thanks and appreciation:
N199 Is there anything you'd like to ask me?
P199 Mmmm no I think you've been very kind and helpful. (030-318)

P204 But apart from that I've had some excellent help and advice this year and from this week and from the nurses, all nursing staff.
N205 Right.
P205 They've been excellent.
N206 Good, good.
P206 And it's very helpful to your recovery.
N207 That's good...
P207 Very helpful. (042-277)

Apologies

Apologies are similar to thanks (76 in SWBD/DAMSL). Typically the nurse is reassuring the patient of her interest and attention, perhaps after an interruption or some seeming oversight:

N1 So go on I'm sorry to have interrupted you but it was just that she had to get out. So it's numb and you can't, (031- 198)

N105 Barbara I'm sorry I didn't check out how you are in here, how are you in this room, is that alright? (057- 356)

N208 Bearing in mind there are a lot of questions I get asked that I can't give the answers to.
P209 Yes.
N209 I'm afraid, but I'll come and see you next week. (063-489)

Apologies can also be indirect or implicit:
(after talking about problems)
P314 ...poor girl you've got to listen to all that ... (06-017)

2.3 Closures

"Conventional-closing" is the tenth most frequent tag in SWBD/DAMSL (although still only 1% (2486/ 205,000)). Our corpus is distinguished not so much by the frequency as the nature of closures. The evidence is incomplete, as in many dialogues the tape runs out or is switched off before the end, but typically the closure of a dialogue is long, and explicitly negotiated. The nurse makes it clear to the patient that the conversation is ending, in a way which does not leave the patient feeling cut off or abandoned (the imminent arrival of lunch is often given as a reason):

N131 Alright then. I'll cut it short so you can have your lunch. (018-168)

Expressions of thanks and/or appreciation are common:

N114 Right, I wouldn't envy you that job, you have loads of problems with Councils. Shall we let Charlotte back in?
P114 Yes, yes, yes.
N115 And then we'll be able to have, we'll see what she has to do, you can fill the forms in because it will be getting towards lunch time anyway, what time is your lunch here?
P115 Oh usually about now.
N116 Right I'll swap over and let Charlotte in ... thanks very much that was brilliant. (025-153)

We often find a series of summarising statements within a closing sequence:

N160 No. Right well I'll see if there's anything I can do about that then and I'll pop back next week but give me a ring in the meantime if there's any problems. I'll speak to Dr Clarke and see what he thinks about this pain in your back.
P161 Yes.
N161 And see if there's anything else that we can, bearing in mind you've only been on the MST properly for a short time.
P162 Mmmm.
N162 It might, we'll just have to see how that works.
P163 Its not too bad today is my back.
N163 Right. Anyway I'll pop in next week.
P164 Yes.
N164 And, you know, just monitor how things are going and how you're managing. Alright?
P165 Yes. (020-139)

N107 Have a great weekend.
P107 Yes.
N108 And we'll catch up with you.
P108 Yes.
N109 Either in person or on the phone.
P109 Right.
N110 Next week when we know what else is happening.
P110 Okay.
N111 Other than that we'll actually now step back.
P111 Right, yes, yes.
N112 Unless you need us for anything specific.
P112 Okay well I know where you are.
N113 Because you're back in the hands of,
P113 Just the medical team.
N114 That's right yes for your treatment.
P114 Yes, yes.
N115 Alright then.
P115 Right. Thank you very much.
N116 Okay see you soon.

P116 Yes, yes.
N117 Shall I walk you back down?
P117 Right thank you, I'm not quite straight yet but I'm getting there. (027-334)

Both participants seem to be taking their last opportunity to check that mutual understanding is complete. Sometimes contact details are given or new topics arise at this point:
N558 Oh, I'll finish off now anyway. (023-111)
The tape runs out at P604, after some repetition of earlier topics and some new ones.

3 Analysis

Cancer care dialogues are health-critical. Misunderstandings in casual conversation are unlikely to have dire consequences: here, they easily could. Both participants need to be unusually clear, and to ensure that the clarity is mutual. This results in an unusual predominance of DAs which establish and monitor mutual understanding, both factual and emotional. These dialogues are also emotionally charged, and are eased by explicit appreciation and courtesy.

(Formal design of patterns to ensure clarity in dialogues can be found in safety-critical situations such as military command and aviation. The use of repetition to check and confirm understanding is characteristic of Air Traffic Control:
Tower: BA117 descend 3,000 feet QNH 1017.
Pilot: Descend 3,000 feet QNH 1017, BA117.

Our dialogues are at the other end of the scale for openness and unpredictability: it is interesting to see similar surface devices used for the same purpose in such different environments.)

These findings are somewhat impressionistic, and taken from a relatively small corpus. As soon as we have analysed a larger sample in more detail, it will be possible to verify and quantify these patterns, and to analyse the linguistic characteristics of DAs which have previously eluded us. Also, further comparisons can then be made with other corpora and previous work on dialogue analyses.

Acknowledgements

Appreciation for their support of this research goes to Manchester University Computer Science Department for funding Richard Craggs and Cancer Research UK for funding Ian Fletcher.

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