A study of closings in nurse-elderly resident consultations at a mobile integrative health centre

Winnie Cheng

The Hong Kong Polytechnic University

ABSTRACT

The study examines the genre of nurse-elderly resident consultations in Hong Kong to find out how the closings of their interactions are structured; specifically, it aims to ascertain the extent to which the patterns of closings conform to the canonical closing, or archetype closing, identified in telephone calls and conversations in American English. The study also compares how frequently the nurse and the elderly resident initiate different patterns of closings, and examines suspension or delay of a closing in the medical consultations. Not only the patterns of closings, but also in what way important meanings are negotiated by the two groups of interacting speakers over a small number of turns, ranging from one to four, have been investigated. Findings show that the closing structure and relative frequencies of closings are genre-specific, dependent on such factors as institutional roles and communicative goals, conversational contexts, and relationships of the speakers.

Keywords: nurses, elderly residents, consultations, closing patterns.

1. Introduction

Nurse-patient communication has been an important research topic in healthcare studies, which have often examined communication barriers or problems and interaction patterns and styles. Research has examined nurse-patient communication issues in different clinical or medical settings, including Accident and Emergency (Baillie 2005), midwife hospital (Ferndale et al. 2017), neonatal intensive care unit (Jones et al. 2007), oncology care (Dowling 2008; Jarrett – Payne 2000), and Mobile Integrative Health Centre (Cheng – Chung – Wong 2013).

For decades, international research in nurse-patient communication has examined different areas of communication. Mallett – A'Hern (1996) found that humor can be an indicator of patients' anxiety and difficulties in connection with 'needling'. Studies have confirmed the effectiveness of a patient-centered style of communication that elicited a positive effect on the health provider-patient relationship (Berry 2009) and the provision of individualized care and encouragement of patient participation during the interaction (Bolster – Manias 2010).

An increasingly important area of nurse-patient communication in healthcare studies involves the elderly patient (Anderson et al. 2003; Black et al. 2006; Park - Song 2005; Wengryn - Hester 2011). Park - Song (2005), for instance, investigated communication barriers perceived by the elderly hospitalized patients and by nurses in South Korea. They identified nurserelated barriers, including "using medical terminology", "working without sincere attitude", "authoritative attitude", "sudden change of subject", and "being unfriendly" (Park - Song 2005: 161), and patient-related barriers, including "being hard of hearing", "having poor articulation", "not feeling well", "forgetting things easily", and "being tired" (Park - Song 2005: 162). In another study, Anderson et al. (2003) found that it was difficult to establish or maintain mutual understanding between nurses and elderly patients when the patients were regarded as being in a different world or in a divided world. Both studies recommended considering health-related issues from the perspective of elderly patients to achieve better and more effective communication.

In Hong Kong, like in many parts of the world, a huge challenge for the 21st century is health ageing (Ng – Leung 2010: 2), pointing out an urgent need for the society to adopt a holistic approach toward maintaining the well-being of the elderly, encompassing "physical, mental, diet-and-nutrition, communication, social and psychiatric" aspects. In some ways, the need was realized by the operation of the PolyU-Henry G. Leong Mobile Integrative Health Centre (MIHC), with the mission of integrating "Western medicine and technology with traditional Chinese medical theory and purpose of preserving good health". The aim of the MIHC is to "enable needy elderly residents to attain a healthy lifestyle so that their daily lives are enjoyable and fruitful through achieving the tenets of harmony and equilibrium of body, mind and soul" (media release, The Hong Kong Polytechnic University, 18 Dec 2007). The MIHC is housed in a truck, and since it was established in 2007,

it has been going to different districts in Hong Kong to provide needy elderly residents with free medical services, including a physical health check, general health assessment, pain assessment, happiness test, and referral service.

In order for the MIHC to achieve its aim, it is considered important that the nurses there effectively communicate with the needy elderly residents to understand their medical needs and problems, to deliver appropriate medical services, and to conduct relevant consultation activities with the elderly residents. It is equally important that the elderly residents visiting the MIHC are supported, verbally and emotionally, in such a way that they feel at ease to describe and discuss their health conditions and concerns during the medical consultation. Specifically, the present study examines a small and focused, but important, part of the consultation, namely the closing of the nurse-elderly resident consultation.

2. Literature review

In linguistic research, especially conversation analysis (CA), an approach to the study of social interaction and talk-in-interaction in human communication (Sacks - Schegloff - Jefferson 1974), telephone conversation closings in American English (Schegloff – Sacks 1973) have been investigated. Findings show that the speakers work jointly to close conversations; conversations do not just end but must be closed through an elaborate ritual because of the turn-taking mechanics of conversation. Schegloff -Sacks (1973) observed conversational procedures in closings, which they described as having a universal character, where speakers signal their desire to close the conversation, and others to actually close it. The signal to bring the conversation to an end is realized as a pre-closing adjacency pair which occurs only when the first turn is placed at the "analyzable end of a topic" (Schegloff - Sacks 1973: 305), meaning the pre-closing pair has to be preceded by a "closing down the topic" sequence, with, for example, the interlocutors uttering 'Okay?' and 'Alright.' The canonical closing consists of four turns, organized in two adjacency pairs: a pre-closing, followed by a terminal exchange that has accepted the pre-closing.

Button (1987) expanded on Schegloff – Sacks's (1973) work, suggesting that the occurrence of optional components, such as arrangements, back-references, and topic initial elicitors, can result in the closing sequence being delayed, deferred or even abandoned. Button (1987) calls the closing sequence the "archetype closing" and provides an illustration, as follows:

Table 1. Archetype closing

[SBL:1:1:1:8]

Bea:	And thanks for c	alling.
Dianna:	Alright dear,	[Turn 1: A offers to close (pre-closing)]
Bea:	Alright	[Turn 2: B accepts (second close component)]
Diana:	Bye	[Turn 3: A takes the first terminal turn]
Bea:	Bye	[Turn 4: B reciprocates]

End call

Martinez (2003) observed that the closing structure is genre-specific, dependent on such factors as communicative goal, conversational context, and relationship of the interlocutors. Other research conducted comparative studies of telephone closings between Greek and German (Pavlidou 2000) and between Chinese and English (Sun 2005). Research also examined how the 'ownership' of the closing sequence was claimed by an interlocutor, by filling a slot with a turn-initial high-grade assessment such as 'lovely' or 'brilliant' to indicate a readiness to close the conversation (Antaki 2002). Other studies identified new topics raised in the closing environment (Bolden 2017).

In healthcare communication research, the method of conversation analysis has been widely employed to evaluate the effectiveness of medical consultations (see Maynard – Heritage 2005; Robinson 2001; Campion – Langdon 2004; Jones 2003). Some studies examined the closings of medical interactions. Silverman et al. (1998), for instance, investigated the closing session in doctor-patient consultations, suggesting that an unsuccessful closure, i.e. when the doctor and the patient were uncertain about what had happened and what would be expected in the future, could lead to communication difficulties at the beginning of the next consultation. Robinson (2001) studied how the final-concern sequence was arranged and the implications for topicalization of patients' additional concerns. The researcher found that the arrangement sequence did not provide patients with an opportunity to topicalize additional concerns. In contrast, in Maynard – Heritage's (2005) study, it was found that pre-closing turns could be delayed by inviting discussion of new topics or arrangements for tests, next visits, and so on to evoke a standing doctor-patient relationship, and thus achieving "continuity of care" (Maynard – Heritage 2005: 433).

256

3. The present study

The present conversational analysis focuses on an important stage of the nurse-elderly resident consultation in the PolyU-Henry G. Leong Mobile Integrative Health Centre (MIHC), namely the *conversational closing*, where the nurse makes sure that the elderly resident's illnesses and health concerns are taken care of before sending the elderly resident off, and where the elderly resident makes sure that the nurse provides advice and assistance relevant to the purpose of the visit, including making an appointment for the next visit. The study specifically aims to find out the extent to which the patterns of closing sequences conform to *canonical closing* (Schegloff – Sacks 1973), or *archetype closing* (Button 1987), how the nurse and the elderly resident compare in initiating closing or terminating interaction, as well as the contextual and interactional reasons for any suspension or delay of closing in the nurse-elderly resident consultations.

4. Methodology

The study analysed naturally-occurring talk-in-interaction in Chinese, Cantonese in the majority of cases, between nurses and elderly residents in the MIHC. At the time of data collection, in the MIHC, there were five Advanced Practice Nurses working, all female, on rotation. Some of these nurses were also nutritionists, Bowen therapists, or Traditional Chinese medicine practitioners.

The data were collected from the MIHC during April-June 2011. Throughout the period of data collection, a project associate was collecting data in the MIHC. She acted as an observer, audio-recording and taking notes of the consultations, upon consent of the elderly residents concerned. The audio-taped data analysed in this study was collected in April 2011, with 143 consultations between 5 Advanced Practiced Nurses and 61 elderly residents, 13 male and 48 female. Some of the elderly residents had visited the MIHC more than once before April 2011.

Analysis of the data involved listening to the closing sequence in the audio-recordings and identifying the patterns of closing sequences. The main clue to the onset of the closing sequence was when the nurse gave the elderly resident an appointment slip for the next visit. After the closing sequences in all the 143 consultations had been identified, individual turns in each closing sequence were analysed in terms of who initiated the turn and the specific function of the turn, with reference to the sequence of *canonical closing* (Schegloff – Sacks 1973) or *archetype closing* (Button 1987).

In this paper, quantitative findings are supplemented by qualitative findings, with examples illustrating the contextual and interactional reasons for the patterns identified. Examples presented are in English, translated from Cantonese. The translator was the project associate who adopted the method of free translation, whereby she listened to the recording to understand the meaning of the original Cantonese and then produced English words and clauses that mean the same. The translation was then checked by the author of the paper.

5. Findings and discussion

In this section, first of all, quantitative findings will be presented and discussed. The findings focus on the relative frequencies of the different patterns of closing sequences identified in all the 143 closings audio-recorded in April 2011 in the MIHC, the relative frequencies of closings initiated, as well as those of the closings initiated exclusively by the nurses and the elderly residents, respectively. Notably, the quantitative findings show both typical and atypical closing sequences in the specialized genre analysed, compared to Schegloff – Sacks (1973) and Button (1987). Quantitative findings will then be exemplified to illustrate how the individual patterns of closings are realized in the talk-in-interaction. They will also be discussed with reference to data collected from interviewing some nurses and from field notes taken.

Data analysis shows that the 143 closings identified in the nurseelderly resident medical consultations can be classified into twelve different patterns, in the specific context of interaction examined, the physical context being the MIHC in Hong Kong in 2011, the social context being a nurse giving medical consultation to an elderly resident, and the linguistic context being Cantonese exchanged on topics related to a physical health check, general health assessment, pain assessment, happiness test, and referral service. Table 2 presents the twelve patterns of closing sequences in nurse-elderly resident consultations in the MIHC.

Turn 1 refers to speaker A offering to close (pre-closing), turn 2 speaker B accepting the offer to close (second close component), turn 3 speaker A taking the first terminal turn, and turn 4 speaker B reciprocating.

Patterns of closing sequence in nurse-elderly resident interactions	Frequency (percentage) of initiation of closings by the nurse and elderly resident	
(1) Turn 1 + Turn 2		
Turn 1 + Turn 2,, Turn 1 + Turn 2		
Turn 1 + Turn 2, Turn 1 + Turn 2	60 (41.9%) Nurse: 39 (27.3%) Elderly resident: 21 (14.7%)	
Turn 1,, Turn 1 + Turn 2		
Turn 1, Turn 1 + Turn 2		
Turn 1,, Turn 1 + Turn 2,, Turn 1 + Turn 2		
Turn 1+3,, Turn 1 + Turn 2		
(2) Turn 1	27 (18.9%)	
Turn 1,, Turn 1	Nurse: 20 (14%)	
Turn 1, Turn 1	Elderly resident: 7 (4.9%)	
(3) Turn 3		
Turn 1,, Turn 3		
Turn 1 + Turn 2,, Turn 3		
Turn 1 + Turn 2,, Turn 1 + Turn 2,, Turn 3	10 (7%) Nurse: 7 (4.9%) Elderly resident: 3 (2.1%)	
Turn 1 + 3,, Turn 1 + Turn 2,, Turn 3		
Turn 1 + Turn 2, Turn 1 + Turn 2+4, Turn 1 + Turn 2, , Turn 3		
Turn 1+3 + Turn 2+4,, Turn 3, Turn 3		
(4) Turn 3 + Turn 4		
Turn 1 + Turn 2, Turn 1 + Turn 2,, Turn 3 + Turn 4,, Turn 3 + Turn 4	9 (6.3%) Nurse: 2 (1.4%) - Elderly resident: 7 (4.9%)	
Turn 1 + Turn 2, Turn 1 + Turn 2,, Turn 1 + Turn 2,, Turn 3 + Turn 4		
Turn 1 + Turn 2,, Turn 1 + Turn 2,, Turn 3 + Turn 4		
Turn 3,, Turn 3 + Turn 4		
(5) Turn 1 + Turn 2 + Turn 3	8 (5.6%) Nurse: 7 (4.9%) Elderly resident: 1 (0.7%)	
Turn 1 + Turn 2, , Turn 1 + Turn 2 + Turn 3		
Turn 1,, Turn 1 + Turn 2,, Turn 1 + Turn 2 + Turn 3		

Table 2. Patterns of closing sequences in nurse-elderly resident interactions in MIHC

(6) Turn 1 + Turn 2 + Turn 3 + Turn 4 (archetype closing)		
Turn 1, , Turn 1, Turn 1+ Turn 2 + Turn 3 + Turn 4	6 (4.2%)	
Turn 1 + Turn 2, Turn 1 + Turn 2 + Turn 3 + Turn 4	Nurse: 3 (2.1%) Elderly resident: 3 (2.1%)	
Turn 1 + Turn 2, , Turn 1 + Turn 2 + Turn 3 + Turn 4		
Turn 1 + Turn 2,, Turn 1,, Turn 1 + Turn 2 + Turn 3 + Turn 4		
(7) Turn 1+3	6 (4.2%)	
Turn 1 + Turn 2,, Turn 1+3	Nurse: 6 (4.2%) Elderly resident: (0%)	
(8) Turn 1+3 + Turn 4		
Turn 1 + Turn 2, , Turn 1+3 + Turn 4	5 (3.5%)	
Turn 1+3, Turn 1 + Turn 2,, Turn 1+3 + Turn 4	Nurse: 5 (3.5%)	
Turn 1,, Turn 1 + Turn 2, Turn 1 + Turn 2,, Turn 1 + Turn 2, Turn 1+3 + Turn 4	Elderly resident: 0 (0%)	
(9) Turn 1 + Turn 2+3 + Turn 4	4 (2.8%)	
Turn 1,, Turn 1+ Turn 2+3 + Turn 4	Nurse: 2 (1.4%) Elderly resident: 2 (1.4%)	
(10) Turn 1+3 + Turn 2	3 (2.1%)	
Turn 1 + Turn 2,, Turn 1 + Turn 2,, Turn 1+3 + Turn 2	Nurse: 1 (0.7%) Elderly resident: 2 (1.4%)	
(11) Turn 1+3 + Turn 2+4	3 (2.1%) Nurse: 1 (0.7%) Elderly resident: 2 (1.4%)	
Turn 1 + Turn 2 + Turn 3,, Turn 1+3 + Turn 2+4		
(12) Turn 1 + Turn 2+3	4 (1.4%) Nurse: 0 (0%) Elderly resident: 2 (1.2%)	
Turn 1,, Turn 1+ Turn 2+3		
Total	143 (100%) Nurse: 93 (65%) Elderly resident: 50 (35%)	

A number of findings, eleven in total, are observed in Table 2. First and foremost, the study has identified a wide range of twelve patterns of closing sequences. Second, interestingly, in the face-to-face nurse-elderly resident

consultations in the MIHC, only 4.2% of closings have the sequence of the *canonical closing* (Schegloff – Sacks 1973) or *archetype closing* (Button 1987) identified in telephone conversations in American English. It is Pattern 6: Turn 1 + Turn 2 + Turn 3 + Turn 4, with the nurses (2.1%) and elderly residents (2.1%) initiating the same infrequent percentages of instances.

Third, another fascinating finding is the different types of patterns of potential closings that come before the actual closing occurs for all the twelve patterns. It is found that, generally, the more frequent patterns of closings are characterized by a larger number of types of potential closings, as shown in Table 3.

Pattern	Per- centage	Number of potential closings preceding actual closing	Pattern	Per- centage	Number of potential closings preceding actual closing
1	41.9	6	7	4.2	1
2	18.9	2	8	3.5	3
3	7.0	6	9	2.8	1
4	6.3	4	10	2.1	1
5	5.6	2	11	2.1	1
6	4.2	4	12	1.4	1

Table 3. Number of potential closings before the actual closing across twelve patterns

Take the frequent pattern, Pattern 1: Turn 1 + Turn 2 (41.9%), as an example. As summarized in Table 4, six types of patterns of potential closings have been found to precede the actual closing of the nurse-elderly resident consultations, which is highlighted in bold.

Table 4. The six types of patterns of potential closings

1.	(Turn 1 + Turn 2),, (Turn 1 + Turn 2)
2.	(Turn 1 + Turn 2), (Turn 1 + Turn 2)
3.	(Turn 1),, (Turn 1 + Turn 2)
4.	(Turn 1), (Turn 1 + Turn 2)
5.	(Turn 1),, (Turn 1 + Turn 2),, (Turn 1 + Turn 2)
6.	(Turn 1),, (Turn 1 + Turn 2),, (Turn 1 + Turn 2)

All the six patterns of potential closings are found invariably to begin with Turn 1 (pre-closing), in some cases accepted, and this is followed by more talk, and then perhaps another pre-closing-acceptance pair with even more talk, before the consultation is finally brought to an end. This finding will be exemplified in Example 13, and further discussed.

Fourth, the most frequent pattern is Pattern 1 (41.9%): Turn 1 + Turn 2, without the terminal adjacency pair. From these findings, it can be said that the *quintessential* pattern of closings in this specialized genre of nurse-elderly resident consultations is Pattern 1, consisting of only the pre-closing pair (Schegloff – Sacks 1973), or the first two turns described in Button (1987):

Turn 1: A offers to close (pre-closing)Turn 2: B accepts (second close component)

This means that this *quintessential* pattern of closings does not contain Schegloff – Sacks' (1973) second adjacency pair, namely a terminal exchange that has accepted the pre-closing, or Button's (1987) third and fourth turns, as follows:

Turn 3: A takes the first terminal turn Turn 4: B reciprocates

Fifth, the most frequent pattern of closings, Pattern 1: Turn 1 + Turn 2 (41.9%), is followed by Pattern 2: Turn 1 (18.9%). There is quite a big difference, 23%, between these two patterns; together they constitute 60.8% of all the closings. The remaining ten patterns, amounting to 39.2% of all the instances of closings, have rather low frequencies, ranging from 7% to 1.4%.

Sixth, among the 143 instances of nurse-elderly resident consultation closings, 93 instances (65%) are initiated by the nurses, and 50 instances (35%) are initiated by the elderly residents, which is quite a noticeable difference. The difference is noticeable not only in the frequencies of occurrence, but also in reflecting the relative institutional role and power differences between the two groups of speakers in the medical consultations, with the nurses in the MIHC playing a more active role in determining at which point the consultation comes to an end. Having said that, it is, however, noted that the elderly residents do, in one-third of cases, initiate closings. Field observation notes show that many elderly residents have become familiar with the rather routinized sequence of events in the consultation. When the elderly residents sense that it is about time for the consultation to finish, especially when the nurses introduce the topic of making an appointment for the next visit, verbally or non-verbally, they sometimes initiate a closing.

Seventh, in terms of frequencies of occurrence, the nurses are found to initiate six of the twelve patterns of closings more frequently than the elderly residents. They are:

Pattern 1: Turn 1 + Turn 2 (27.3% vs. 14.7%) Pattern 2: Turn 1 (14% vs. 4.9%) Pattern 3: Turn 3 (4.9% vs. 2.1%) Pattern 5: Turn 1 + Turn 2 + Turn 3 (4.9% vs. 0.7%) Pattern 7: Turn 1+3 (4.2% vs. 0%) Pattern 8: Turn 1+3 + Turn 4 (3.5% vs. 0%)

Compared with the nurses, the elderly residents initiate four of the twelve patterns of closings more frequently. These patterns are, however, relatively infrequent. They are:

Pattern 4: Turn 3 + Turn 4 (4.9% vs. 1.4%) Pattern 10: Turn 1+3 + Turn 2 (1.4% vs. 0.7%) Pattern 11: Turn 1+3 + Turn 2+4 (1.4% vs. 0.7%) Pattern 12: Turn 1 + Turn 2+3 (1.2% vs. 0%)

Also concerning frequencies of occurrence, the nurses and the elderly residents initiate the same two patterns of closings equally, and infrequently. They are:

Pattern 6: Turn 1 + Turn 2 + Turn 3 + Turn 4 (archetype closing) (2.1% vs. 2.1%) Pattern 9: Turn 1 + Turn 2+3 + Turn 4 (1.4% vs. 1.4%)

Eighth, certain patterns of closings are initiated exclusively by one of the speaker parties in the medical consultations. The nurses are found to initiate all the patterns of closings, except one:

Pattern 12: Turn 1 + Turn 2+3

The elderly residents initiate all patterns except two:

Pattern 7: Turn 1+3 Pattern 8: Turn 1+3 + Turn 4

Ninth, two of the twelve patterns consist of only one turn, and so strictly speaking, these cannot be termed a sequence type. They are:

Pattern 2: Turn 1 (18.9%) Pattern 3: Turn 3 (7%) Together, these two patterns account for one quarter (25.9%) of all the instances of closings. These single turn closings rank second and third among the twelve patterns of closings, accounting for 44.8% of all the instances of closings by pattern.

Tenth, six of the twelve patterns consist of one turn with two speech functions. These are Patterns 7, 8, 10 and 11 having Turn 1+3 in one turn, as well as Patterns 9, 11 and 12 having Turn 2+4 in one turn. Pattern 11 has two turns: Turn 1+3 + Turn 2+4.

To be specific, Pattern 7 (4.2%), Pattern 8 (3.5%), Pattern 10 (2.1%), and Pattern 11 (2.1%) all begin with Turn 1+3; that is, the speaker is offering to close (pre-closing) and taking the first terminal turn within one turn. Both Pattern 9 (2.8%) and Pattern 12 (1.4%) begin with Turn 1, followed by Turn 2+4 in one turn. This means that in one turn, speaker B both accepts the offer to close (Turn 2) and reciprocates (Turn 4), without the occurrence of Turn 3, which is speaker A taking the first terminal turn (Button 1987). Pattern 11 (2.1%): Turn 1+3 + Turn 2+4 is unique as it is made up of two turns with two speech functions in each.

Eleventh, both Pattern 3 (7.3%) and Pattern 4 (6.3%) begin with Turn 3 (the speaker taking the first terminal turn), without any pre-closing (Turn 1) and second close component (Turn 2).

In the following, examples of closings are discussed to illustrate the twelve different patterns.

Example 1 concerns the most frequent and quintessential pattern, Pattern 1: Turn 1 + Turn 2 (41.9%), which is characterized by an absence of a final exchange; that is, it does not have the first terminal turn (Turn 3) and the reciprocating turn (Turn 4) (Button 1987).

(1) **Pattern 1: Turn 1 + Turn 2**

NR: hey I'll arrange it that you come back at 1:45 in the afternoon on the 20th of July I know you are worried I'd rather let you do it twice in three months you can come back less often later when your indexes are stable **yea that's it** ER41: **yea okay alright**

The nurse's '**yea that's it**' signals to the elderly resident that she is ready to close the consultation (pre-closing) and the elderly resident's '**yea okay alright**' serves to accept the offer (second close component). There is absence of a terminal pair.

Example 2 below illustrates Patten 2: Turn 1 (18.9%).

(2) Pattern 2: Turn 1

NL: alright hey (EC11) this is your membership number yea $26^{\rm th}$ of April Tuesday yea 10:15 am

EC11:26th of this month

NL: 26th of the month which means two weeks later it's the 12th today two weeks later when will be after the Easter holiday if you are not able to come that day you can call the office yea unless there is a very hot weather warning or anything else then we will be coming yea okay alright remember to bring the medicine with you **okay**

In the last utterance by the nurse, '**okay**' in 'remember to bring the medicine with you **okay**' is a pre-closing. At this point, the elderly resident (EC11) stands up and leaves without any verbal response, and so there is absence of a second close component to show agreeing to close consultation.

Example 3 shows Pattern 3, consisting of one single turn, Turn 3 (7%). This turn occurs without a pre-closing pair (Turn 1 and Turn 2) and without a reciprocating Turn 4. This can happen when a nurse has finished the consultation and then immediately bids goodbye to the elderly resident.

(3) **Pattern: Turn 3** NL: **bye bye**

Pattern 4 Turn 3 + Turn 4 (6.3%) consists merely of a final terminal pair without a preceding pre-closing-acceptance pair. As discussed, the elderly residents (4.9%) initiate Pattern 4 more frequently than the nurses (1.4%). See Example 4 below:

(4) Pattern 4: Turn 3 + Turn 4
NR: EC3 okay alright wait a second huh
EC3: bye bye ((pause)) hey bye bye
NR: oh bye bye ((laugh))

In Example 4, the nurse's utterance begins with calling the elderly resident's name 'EC3 okay alright wait a second huh'. She does not seem to have finished the consultation and is asking the elderly resident to 'wait a second'. In other words, she is not yet ready to initiate a pre-closing. The elderly resident, however, takes the first terminal turn by saying '**bye bye** ((pause)) **hey bye bye**' which is then reciprocated by the nurse '**oh bye bye**'.

Pattern 5: Turn 1 + Turn 2 + Turn 3 (5.6%) is similar to Button's (1987) *archetype closing*, minus the last turn that reciprocates the first terminal turn. Example 5 below illustrates Pattern 5.

(5) Pattern 5: Turn 1 + Turn 2 + Turn 3
 EC43: alright thank you I can leave now eh
 NR: yes sure
 EC43: okay bye bye

In Example 5, the pre-closing is initiated by the elderly resident, saying 'I can leave now eh'. The nurse accepts the offer to close with 'yes sure'. Then the elderly resident takes the first terminal turn by saying 'okay bye bye', which the nurse does not reciprocate.

Example 6 below shows Schegloff – Sacks' (1973) *canonical closing*, or Button's (1987) *archetype closing*, having all of the four turns. In this study, Pattern 6: Turn 1 + Turn 2 + Turn 3 + Turn 4 occurs only rarely (4.2%).

(6) Pattern 6: Turn 1 + Turn 2 + Turn 3 + Turn 4 NL: okay thank you [Turn 1: Nurse L offers to close (pre-closing)] EC16: thank you everyone [Turn 2: Elderly resident 16 accepts (second close component)] NL: bye bye [Turn 3: NL takes the first terminal turn] EC16: bye bye bye bye [Turn 4: EC16 reciprocates]

Pattern 7: Turn 1+3(4.2%) comprises one turn, performing two functions. The standalone turn has a pre-closing showing an offer to close the interaction, immediately followed by the first terminal turn. Findings show that all the three instances of Pattern 7 are initiated by the nurse. See Example 7:

(7) **Pattern 7: Turn 1+3**

NL: really I remember what you have said **alright alright yea bye bye**

Example 7 shows the nurse uttering 'alright alright alright' to offer to close the consultation, and then 'yea bye bye' to take the first terminal turn. The elderly resident does not give a response.

Pattern 8 has the structure of Turn 1+3 + Turn 4 (3.5%). See Example 8:

(8) Pattern 8: Turn 1+3 + Turn 4
 NL: okay you will come back in two weeks okay that's it for today bye bye
 EC18: bye bye

Example 8 shows that in the turn taken by the nurse, a pre-closing 'okay that's it for today' is combined with the first terminal turn 'bye bye'. The nurse's turn is reciprocated by the elderly resident saying 'bye bye'.

Pattern 9: Turn 1 + Turn 2+3 + Turn 4 (2.8%) is illustrated in Example 9.

(9) Pattern 9: Turn 1 + Turn 2+3 + Turn 4
 NM: alight then you will get more of this pills next time okay
 EC22: good right thank you nurse bye bye
 NM: bye bye

In Example 9, the nurse offers to close the consultation with '**okay**' after making a remark about the next consultation. The elderly resident accepts the offer to close by saying '**good right thank you nurse**' and then takes the first terminal turn by bidding the nurse goodbye with '**bye bye**'. The nurse says '**bye bye**' in response.

Pattern 10 takes the structure of Turn 1+3 + Turn 2 (2.1%), as illustrated below.

(10) Pattern 10: Turn 1+3 + Turn 2
 EC5: thank you nurse bye bye bye
 NL: oh no problem

In Example 10, the elderly resident, in the same turn, introduces a preclosing '**thank you nurse**', and then takes the first terminal turn '**bye bye bye bye**'. The nurse accepts the pre-closing with '**oh no problem**' but does not say anything to reciprocate the first terminal turn.

Pattern 11 has the sequence of Turn 1+3 + Turn 2+4 (2.1%). See Example 11:

(11) Pattern: Turn 1+3 + Turn 2+4
EC8: thank you bye bye.
NL: you are welcome bye bye

Each of the two turns performs two speech functions. In one turn, the elderly resident offers to close the consultation with '**thank you**' and then takes the first terminal turn by uttering '**bye bye**'. In the turn that follows, the nurse accepts the offer to close by saying '**you are welcome**' and reciprocates the first terminal turn by saying '**bye bye**' also in one turn.

The last of the twelve patterns, Pattern 12: Turn 1 + Turn 2+4 (1.4%), is exemplified below:

(12) Pattern 12: Turn 1 + Turn 2+3 EC27: thank you thank you NW: uh huh bye bye

In Example 12, the elderly resident offers to close the consultation with a pre-closing, saying 'thank you thank you'. The nurse accepts it with

a second close component '**uh huh**' and, immediately after this, says '**bye bye**' to take the first terminal turn in the same turn. The elderly resident does not reciprocate.

Example 13 below shows a longer interactional extract, with more turns preceding the closing sequence in order to demonstrate the finding that different patterns of potential closings can take place before the actual closing occurs. This finding applies to all of the twelve patterns, especially to frequently occurring patterns of closings. Example 13 shows that the nurse-elderly resident consultation eventually closes with Pattern 8: Turn 1+3 +Turn 4 (3.5%).

(13)

- 1. NM: alright [Turn 1 pre-closing] ((pause)) don't drink too much
- 2. water
- 3. EC22: er when is it in May
- 4. NM: on the 25th of May at 2 pm in the afternoon
- 5. EC22: yea yea yea
- 6. NM: remember not to drink too much water walk more and do more
- 7. exercise
- 8. EC22: yes yes yes
- 9. NM: right then I'll check your blood pressure again next time okay
- 10. [Turn 1 pre-closing]
- 11. EC22: good right thank you nurse [Turn 2 second close component]
- 12. NM: uh huh alright take care [Turn 3 first terminal turn]
- 13. EC22: alright [Turn 4 reciprocates]
- 14. NM: get your things packed
- 15. ((pause))
- 16. NM: sometimes it's not good to have an excessive amount in any-
- 17. thing drinking too much water is not good for your health
- 18. EC22: right right
- 19. NM: you may need to go to the toilet often
- 20. EC22: thank you nurse.
- 21. NM: go to the restroom first before going home yea
- 22. EC22: yes yes
- 23. NM: uh huh take care [Turn 1 pre-closing]
- 24. EC22: uh huh thank you [Turn 2 second close component]
- 25. NM: alright okay bye bye [Turn 1+3 first terminal turn]
- 26. EC22: bye bye [Turn 4 reciprocates]

Example 13 shows that the closing is found to be preceded by a few potential closings, organized as follows:

Turn 1, ..., Turn 1 + Turn 2 + Turn 3 + Turn 4, ..., Turn 1 + Turn 2 + Turn 1+3 + Turn 4

In line 1, before the nurse says 'alright', she has just handed out an appointment slip to the elderly resident, and so she is ready to close the interaction. There is no response from the elderly resident. After a pause, the nurse continues to speak. The second potential closing begins in line 9, when the nurse utters 'okay'. This offer to close is accepted by the elderly resident, replying with 'good right thank you nurse' (line 11). This preclosing pair is then followed by the terminal pair, with the nurse saying '**uh** huh alright take care' (line 12), and the elderly resident responding with 'alright' (line 13). After this 'closing' sequence, however, the nurse continues with more talk. Another potential closing takes place in line 23, where the nurse initiates an offer to close 'uh huh take care' which is responded to by the elderly resident with 'uh huh thank you' (line 24). The consultation, however, does not close at this point. The nurse goes on with 'alright okay **bye bye**' (line 25), which is a combination of offering to close and the first terminal pair, to which the elderly resident responds by bidding the nurse goodbye with 'bye bye' (line 26). Altogether there have been three attempts to close the consultation before the actual closing takes place.

Apart from analyzing the textual data, the study also asked the nurses of the MIHC to share their own experiences and perceptions related to the way in which closings are performed. One of the nurses remarked that there was no actual or real closing of consultation because the care that they delivered to the elderly residents was continuous, and that there was an expectation of a next consultation, and more. Generally, the nurses are concerned about the sustainability and continuity, as well as the well-being of the members of the community, of healthcare service. The relationship between the nurses and elderly residents in the MIHC is a longer-term one, compared with other clinical or medical settings, such as Accident and Emergency (Baillie 2005) and public health clinics and private clinics in Korea (Kim 2017). In fact, during the three months of data collection in the MIHC, the project researcher had not found any case closed. This is strong evidence for the emphasis of "continuity of care" (Maynard – Heritage 2005) by the organisations which operate the MIHC.

Since the duration of one single consultation is 45 minutes, there is more time for the nurse to communicate with the elderly resident to understand their needs and concerns. This partly explains the predominant finding regarding the occurrence of multiple potential closings before a consultation is eventually brought to a close. This finding is comparable to that of Maynard – Heritage's (2005) study, showing that a standing doctorpatient relationship is promoted and continuity of care is achieved by means of delayed pre-closing turns, which function to enable further talk on new topics or arrangements for tests and next visits. In this study, the various patterns or sequences of closings, as well as occurrence of closings that are initiated by either the nurse or the elderly resident, have been observed to be equally effective in terms of the provision of individualized care and encouragement of elderly resident participation during the medical consultative interaction (Bolster – Manias 2010), having a positive effect on the 'health provider-patient' relationship (Berry 2009).

Most of the pre-closing turns are initiated by the nurses, showing that they are the ones granted with institutional power and authority in the MIHC setting, and in fact, they are in control of the entire consultative interaction. However, the nurses do not dominate closing initiations; elderly patients also share some of the responsibilities. In addition, this study does not yield any findings that constitute an unsuccessful closure, compared with the closing session in doctor-patient consultations in Silverman et al.'s (1998) study when the doctor and the patient were uncertain about what had happened and what would be expected in the future.

6. Conclusion and implications

The study sets out to ascertain the extent to which the patterns of closing sequences conform to canonical closing (Schegloff - Sacks 1973), or archetype closing (Button 1987), how the nurse and the elderly resident compare in initiating closings, as well as the contextual and interactional reasons for any suspension or delay of closings in the nurse-elderly resident consultations. The aim of the study has been addressed. The main conclusion is aligned with that of Martinez (2003); that is, the closing structure is genre-specific, dependent on such factors as communicative goal, conversational context, and relationship of the interlocutors. Not only the closing structure, but also in what way important meanings are negotiated by the two groups of interacting speakers over a small number of turns, ranging from one to four, have been investigated and have revealed informative results. The study has accounted for the findings by drawing upon not only the local context, physical, social and linguistic (Thomas 1995), of the nurse-elderly resident consultation, but also broader institutional communicative purposes specific to this specialized genre.

This preliminary study of closing sequences in nurse-elderly resident consultations in the Mobile Integrative Health Centre (MIHC) is the first step to further studies of the patterns, and discourse and pragmatics, of closings in medical interactions. The quintessential Pattern 1, as well as other frequent patterns of closings identified in the study, could also be a useful reference, and even benchmark, for future studies when evaluating communicative effectiveness of medical consultation closings, and in turn empowering medical and healthcare professionals in communicating with their patients and contributing to an improved quality of life for the elderly and other groups of patients.

REFERENCES

Sources

Data set of nurse-elderly resident consultations of PolyU-Henry G. Leong Mobile Integrative Health Centre (MIHC) 2011. Collected by W. Cheng.

Special studies

Anderson, R.	A. – L.M. Issel – R.R. McDaniel, Jr.	
2003 "Nursing homes as complex adaptive systems: Relationship		
	management practice and resident outcomes", Nursing Research 52 (1),	
	12-21.	
Antaki, C.		
2002	"Personalized revision of 'failed' questions", Discourse & Society 4 (4),	
	411-428.	
Baillie, L.		
2005	"An exploration of nurse-patient relationships in accident and	
	emergency", Accident and Emergency Nursing 13 (1), 9-14.	
Berry, J.A.		
2009	"Nurse practitioner/patient communication styles in clinical practice",	
	The Journal for Nurse Practitioners 5 (7), 508-515.	
Black, B.S. et	al.	
2006	"Health problems and correlates of pain in nursing home residents	
	with advanced dementia", Alzheimer Disease and Associated Disorders	
	20 (4), 283-290.	
Bolden, G.B.		
2017	"Opening up closings in Russian". In: G. Raymond – G.H. Lerner	
	– J. Heritage (eds.) Enabling Human Conduct: Naturalistic Studies of	

Talk-in-Interaction in Honor of Emanuel A. Schegloff. Amsterdam: John Benjamins, 233-273.

- Bolster, D. E. Manias
 - 2010 "Person-centred interactions between nurses and patients during medication activities in an acute hospital setting: Qualitative observation and interview study", *International Journal of Nursing Studies* 47 (2), 154-165.

Button, G.

- 1987 "Moving out of closings." In: G. Button J. Lee (eds.) *Talk and Social Organization*. Clevedon: Multilingual Matters, 101-151.
- Campion, P. M. Langdon
 - 2004 "Achieving multiple topic shifts in primary care medical consultations: A conversation analysis study in UK general practice", *Sociology of Health and Illness* 26 (1), 81-101.
- Cheng, W. W.Y.J. Chung M.C. Wong
 - 2013 "Gender communication: Nurse-client interactions in the mobile integrative health centre, *Linguistic Research* 12, 139-157.

Dowling, M.

- 2008 "The meaning of nurse-patient intimacy in oncology care settings: From the nurse and patient perspective", *European Journal of Oncology Nursing* 12 (4), 319-328.
- Ferndale, D. et al.
 - 2017 "You don't know what's going on here': A discursive analysis of midwifery hospital consultations", *Health Risk & Society* 19 (7-8), 411-431.
- Jarrett, N.J. S.A. Payne
 - 2000 "Creating and maintaining optimism in cancer care," *International Journal of Nursing Studies* 37 (1), 81-90.

Jones, A.

- 2003 "Nurses talking to patients: Exploring conversation analysis as a means of researching nurse/patient communication", *International Journal of Nursing Studies* 40 (6), 609-618.
- Jones, L. D. Woodhouse J. Rowe
 - 2007 "Effective nurse parent communication: A study of parent's perceptions in the NICU Environment", *Patient Education and Counseling* 69 (1-3), 206-212.

Kim, D.

2017 "Public Health Crisis in South Korea: Policy Failure or Social Trust?", *Korean Cases in Public Administration for Training and Practice I,* Korean Insitute of Public Administration (KIPA) Case Study Series 1. South Korea: Daeyoung Moonhwasa Publishing Co., 193-225

Mallett, J. – R. A'Hern

1996 "Comparative distribution and use of humour within nurse-patient communication", *International Journal of Nursing Studies* 33 (5), 530-550.

Martinez, E.R.

- 2003 "Accomplishing closings in talk show interviews: A comparison with news interviews", *Discourse Studies* 5 (3), 283-302.
- Maynard, D.W. J. Heritage
 - 2005 "Conversation analysis, doctor-patient interaction and medical communication", *Medical Education* 39 (4), 428-435.

Ng, G. – W. Leung

- 2010 "White paper. Theme-based research scheme", *Research Grants Council*, Hong Kong.
- Park E.K. M. Song
 - 2005 "Communication barriers perceived by older patients and nurses", International Journal of Nursing Studies 42 (2), 159-166.

Pavlidou, T.-S.

2000 "Telephone conversations in Greek and German: Attending to the relationship aspect of communication". In: H. Spencer-Oatey (ed.) *Culturally Speaking: Managing Rapport through Talk across Cultures*. London: Continuum, 121-142.

Robinson, J.D.

- 2001 "Closing medical encounters: Two physician practices and their implications for the expression of patients' unstated concerns", Social Science & Medicine 53 (5), 639-656.
- Sacks, H. E.A. Schegloff G. Jefferson
 - 1974 "A simplest systematics for the organization of turn taking for conversation", *Language* 50 (4), 696-735.

Schegloff, E.A. – H. Sacks

- 1973 "Opening up closings", *Semiotica* 8 (4), 289-327.
- Silverman J. S. Kurtz J. Draper

1998 *Skills for Communicating with Patients.* Oxford: Radcliffe Medical Press.

Sun, H.

2005 "Collaborative strategies in Chinese telephone conversation closings: Balancing procedural needs and interpersonal meaning making", *Pragmatics* 15 (1), 109-128.

Thomas, J.

1995 *Meaning in Interaction: An Introduction to Pragmatics*. London; New York: Longman.

Wengryn, M.I. – E.J. Hester

2011 "Pragmatic skills used by older adults in social communication and health care contexts: Precursors to health literacy", *Contemporary Issues in Communication Science and Disorders* 38 (Spring), 41-52.

Address: WINNIE CHENG, Department of English, The Hong Kong Polytechnic University, Hunghom, Hong Kong.

ORCID code: orcid.org//0000-0001-7935-102X.