

Research Article

The Analysis of Interview Data Toward The Early Detection of Dementia

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ABSTRACT

Generally, dementia is defined as a general term for sustainable decline of memory, language and other thinking abilities, therefore, the early detection is important. However, it is often failed because it is difficult to articulate dementia problem verbally. In this paper, from the perspective of narrative approach, I analyzed semi-structured interview data stored in DIPEX-Japan, a database of individual experiences of health and illness, and discussed the difficulty of early detection of dementia. I concluded the importance of narratives without specific events because they are less influenced by cognitive bias.

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1. Introduction

The early detection of dementia is important. Honma [1] pointed out the importance of the early detection as follows. In case of Alzheimer's dementia, its progress will be delayed by Donepezil hydrochloride, which is a type of medicine. Therefore, a period of in-home care will be extended. The right of self-determination will be respected. For example, the elderly people will be able to communicate with their family regarding wealth management or nursing before they will suffer from several symptoms of dementia. QOL (Quality of Life) will be preserved. If care-givers (including family members) recognize the state of dementia in advance, they will be able to keep communicating with a person with dementia. To detect dementia, several tools and services have been recommended. For example, Matsumoto et al. detected the changes of daily rhythm, including the time an elderly person wakes up, for the purpose of dementia early detection [2]. In addition, Tamamizu et al. suggested anomaly detection for home dementia care based on environmental sensing technique [3]. There are also several tools which requires subjective judgement. Fundamental checklist is shown in a manual

for preventing nursing [4]. According to this list, when an elderly person is pointed out that he/she is forgetful, the decline of cognitive functions will be suspected. However, it is difficult to determine whether an elderly person is dementia or not. Generally, dementia is defined as a general term for sustainable decline of memory, language and other thinking abilities that are severe enough to interfere with daily life. The early detection of dementia may be difficult due to the “sustainable” decline of intelligent abilities. In this paper, I examine the difficulty of the early detection of dementia based on interview data among family members and the possibility of using narrative for the early detection of dementia.

2. Dementia and Narrative

Alzheimer's disease, Lewy body disease or cerebrovascular disease are known as the main factor of dementia. However, the appearance of these diseases is not always equal to the beginning of dementia. Deguchi [5], [6] interpreted dementia “not just as physical and somatic problem for the elderly people but as interactive problem due to communicative disorder between the elderly people and people concerned”. Through the

interview data, Deguchi illustrated the phases of dementia troubles as follows:

- 1) Zero point of an unspecialized trouble
- 2) Variation of an interpretation or definition about the trouble
- 3) Confusing how to deal with the troubles
- 4) Regarding the trouble as a claim
- 5) Discussing how to deal with the trouble among people concerned
- 6) Determining how to deal with the trouble among people concerned

To discover the beginning point of dementia trouble (i.e. “Zero point of an unspecialized trouble”), Deguchi interviewed the elderly people with dementia and their family members.

Nakagawa examined the process of dementia in articulation and cognitive anomie hypothesis [7]. According to this hypothesis, “a claim on unspecialized trouble will refuse a process of normalization. Then the claim will gradually be articulated and be classified into deviation, social problems or the other type of problems. Finally, the factor and solution for the claim will be articulated”.

Besides the above, there are several researches which deal with care from the viewpoint of narrative [8], [9], [10], [11]. In the following chapter, I analyze the communicative aspect of dementia and examine the difficulties of the early detection of dementia.

3. Analysis

3.1. Method

I analyzed semi-structured interview data stored in DIPEX-Japan [12]. DIPEX is a database of individual experiences of health and illness. It contains patients’ interview data and is opened to public through the Internet. DIPEX-Japan has various theme of narrative. In each section, there are voice data (several interviewees hide their face) and text data like Fig. 1.

Sato et al. also dealt with DIPEX and argue that “segmented patient narratives can be useful in assisting patients to cope with the uncertainty in medicine and health care” [13]. In the following analysis, I will focus on characteristic phrases on “beginning of dementia”.

3.2. Results

I examined how caregivers (including family members) noticed the beginning of dementia before several types of



インタビュー内容テキスト

実は、異変に気付いたときはね、まあ、今から思うとってことなんですよ。そのときは、やっぱり、分からなかったんです。ていうのが、両親も年とっていきますしね、自分自身もね、昔に比べるとだんだんもの忘れが激しくなってね、外出するにも3回も4回もうちを出入りしたりしている自分があるもんですからね。単純に、両親も、もう年齢的なものかかってそのときは思っていました。

Fig. 1 A sample of interview data stored in DIPEX-Japan (in Japanese)

troubles are clearly classified into dementia. In the following analysis, characteristic phrases will be shown in several categories.

3.2.1. Narratives with specific events

There are several narratives in which people pointed out several specific events they felt wrong or strange as follows:

- 1) “I think she often left her belongings.” (置き忘れとかはね、結構あったと思う。)
 - 2) “It took so long time for my husband to search his belongings.” (あれどこいったんだろうって、探す時間が長くなって。)
 - 3) “He sometimes forgot a password for ATM.” (たまに暗証番号忘れてお金が下ろせなかったりとか。)
 - 4) “He made a phone call to a certain person and did soon again to the same one.” (さっき電話をかけたところにまたかけ直す、みたいなことがあって。)
- These behaviors are nearly equal to the typical dementia symptoms. In addition, several people focused on the other type of behavior.
- 5) “Her behaviors, especially in the way of walking, looked wrong for me.” (やっぱり挙動ですかねえ。歩き方がおかしいとか。)
 - 6) “Her sleeping hours had gradually increased.” (睡眠時間がだんだん長くなってきたようなのを覚えています。)

3.2.2. Narratives without specific events

On the other hand, people sometimes expressed something wrong or strange as follows:

7) “A few years ago before my husband was diagnosed with dementia, I think something strange happened around him.” (その診断の2,3年前には、何かいろいろあったような気がする。)

8) “My mother had been mature for her age. However, there were something strange with her.” (しっかりした母親やったんですよ。ところが、何か様子がどうも。)

9) “When I visited my mother, I felt something wrong with her.” (訪ねて行ったときに、どうもいつもと様子が違う感じを受けた。)

3.2.3. Narratives on the failure of the early detection of dementia

There are several narratives in which people did not regard the situation as dementia. Several examples will be shown with Japanese translations (it is written as is):

10) “I hadn't imagined the possibility of disease.” (病気の予想なんかしてなかった。)

11) “I think my family had never considered the possibility of dementia.” (認知症かどうかっていうような風にはみんな捉えてなかったんじゃないかと思う。)

In several cases, I observed the reason people had not regarded as dementia:

12) “My mother had depression and saw her doctor regularly. So I was not sure whether she was dementia or not.” (うつになって以来神経科とかにかかかって、それでずーっと来たので、その異変っていうのが、どこから異変っていうのがわからなくて。)

13) “I thought she looked strange due to her age.” (年をとって、そういうふうになっているみたい。)

14) “On that day, he might be not feeling very well.” (その日は、体調が悪いのかなとか思って。)

As mentioned, the beginning point of dementia is usually not clear. In fact, the following examples show confusions for family members:

15) “I'm not sure when the beginning of dementia is.” (いつごろ始まったかっていうのは、はっきりしない。)

16) “In those days, I was not sure whether my husband is dementia or not.” (そのときは、やっぱり、分からなかった。)

3.3. Discussion

As shown in 3.2.2, people pointed out several specific events they felt wrong or strange. However, these behaviors are nearly equal to the typical dementia symptoms, so it is not so suitable for early detection of dementia. As shown in 3.2.3, people often failed to determine whether their family member was dementia or not because they compared their family with common people. In addition, it may be difficult for them to find the differences between normal state and wrong one.

On the other hand, in the narrative shown in 3.2.1, people expressed they felt something wrong or strange. These narratives do not seem to have significant meanings, however, these feelings may be important to detect the beginning of dementia because they are less influenced by cognitive bias.

4. Conclusion

For the early detection of dementia, I regarded dementia as a type of communicative problem which was gradually articulated through communication with people concerned. From this viewpoint, I examined narrative data stored in DIPEX-Japan and classified characteristic phrases into several categories. Finally, I concluded the importance of the expressions which were not completely verbalized.

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