

Original

Qualitative Analysis of Newspaper Articles to Standardize the Social Background of Simulated Patients: A Pilot Study on Caregiving

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Background: Public engagement in medical education, including the participation of simulated patients, has a favorable influence on students. In Objective Structured Clinical Examinations (OSCE) scenarios, the psychological and social aspects in the biopsychosocial model of the patient do not seem to have been adequately considered. The objective of this study was to identify a series of strategies to explore the concerns of the general public and reflect these concerns in the background characteristics of simulated patients. To enhance understanding, we will also discuss specific examples from studies.

Methods: This study used qualitative document analysis of newspaper articles submitted by the general public. We searched for frequently occurring words in 1,127 articles, and 455 frequent words were selected as potential targets for this study. In this pilot study, the word “caregiving” was selected for analysis, and 43 articles containing this word were included in the database. Extracted texts were qualitatively analyzed using steps for coding and theorizing to generate emergent themes.

Results: A storyline was obtained to establish the simulated patient background for the OSCE. We were able to integrate patient background, such as, “a company employee who regrets not being able to provide the care he had envisioned while balancing work and caregiving.”

Conclusions: The background of simulated patients in medical education can be formulated through document analysis of newspaper articles. Future studies should attempt to verify the validity of this strategy.

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Introduction

Public involvement in medical education is a matter of discussion within the framework of patient and public involvement. Existing evidence suggests that public engagement in medical education favorably influences the general public, the curriculum, the healthcare system¹, and students.

Public involvement reports classify patients, lay representatives, and the public into discrete categories². The public acts as the collective ‘patient voice’ and is representative of all patients in some way. The ‘public’ is represented by organizations like Healthwatch, who acts for all consumers of healthcare services and works collaboratively with other health networks that have shared agen-

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das. In this classification, lay representatives are defined as individuals not engaged in clinical practice or specialization. Nevertheless, these individuals have social backgrounds that are considered advantageous for educational engagement². The lay representative is conceptualized as an external voice characterized by an independent viewpoint that is distinct from the patient's perspective. In a class for first-year medical students, students were reminded of the need to understand the diverse ideas and feelings of others when recognizing the diversity of ideas of simulated patients who participated in the class in their capacity as lay people³. Nevertheless, lay participation in the development of medical curricula is limited⁴. Furthermore, the extent to which medical students understand societal dynamics, civic sentiments, and lay citizens' perspectives on life, and subsequently apply this understanding to their patients, remains to be determined.

A survey of medical schools in Japan revealed a consensus regarding the need for public participation⁵. However, the most common approach in Japan is to participate as a simulated patient or donate a body for dissection. Some survey responses were related to community-based medical education⁵. We believe that medical students should be provided with systematic opportunities to learn the psychological and social elements that form the background of patients⁶. Community-based medical education is a strategy that contributes to this issue⁷⁻⁹. Numerous studies have documented implementation of community-based medical education programs in Japan¹⁰. Although most such initiatives are implemented in local medical institutions, Goodall's report highlights their collaboration with non-medical community organizations¹¹. This partnership has been successful in promoting community health and fostering an understanding of the needs of marginalized populations. Studies have investigated educational practices through interactions with residents of nursing homes¹². There are numerous instances in which the general public can participate in professional medical education at a distance from their positions as patients. It is necessary to systematically educate students to apply what they learn in the community to their subsequent and ongoing medical interviews and to actively identify the psychosocial background of the patient, within the time constraints of the program.

Standardized patient simulations are often used in Objective Structured Clinical Examinations (OSCEs) and have been established as an assessment tool^{13,14}. In Japan, the OSCE is now used as the official examination¹⁵, and a

certification system was established for standardized patients participating in OSCEs, to ensure a uniform nationwide testing standard. The need for an adequate number of standardized patients to participate in official examinations is evident. However, in Japan, medical education involving the participation of simulated patients is primarily supported by the volunteer activities of lay citizens. In Japan, the use of professional actors as simulated patients depends primarily on financial issues, in addition to regional and historical circumstances¹⁶. Although this effort by citizen volunteers is worthy of recognition, concerns have emerged regarding whether the psychological and social aspects of the biopsychosocial model are adequately covered in OSCE-focused activities. For instance, in the OSCE medical interview task scenario, the physiological profile is meticulously designed, yet psychological and social elements frequently rely on a stereotypical approach and are not consistently informed by extensive discourse. Although a biopsychosocial approach to care seems to improve patient satisfaction and health outcomes, it is not widely practiced, perhaps because its lessons have not been translated into observable skills¹⁷. Simulated patients are used mainly to train students in consultation skills and communication skills. Because of cost issues and time constraints in the curriculum, SP utilization for other purposes is not envisioned¹⁶.

A comprehensive framework that addresses the biological context of a patient's condition, psychological well-being, and social determinants that influence health outcomes must incorporate sociological and cultural anthropological perspectives^{18,19}. This study explored the current concerns of the general public regarding social life in Japan, which led to the development of a presentation intended to provide students with a comprehensive understanding of the social and psychological background of Japanese patients. Students need to develop a comprehensive understanding of these background characteristics through direct interaction with patients during medical interviews. Nonetheless, it may be advantageous for them to be exposed to a standardized representation of a citizen or "ideal" models of patients through a simulated patient before starting clinical practice²⁰. In real clinical practice, such as clinical clerkships, changes in social conditions occur, and it is necessary to identify variants that deviate from the norms for each individual patient²¹.

This study proposes a methodology to establish the psychological and social backgrounds of standardized patients in a simulation-based medical education context.

A qualitative document analysis approach was employed, using newspaper articles as textual data²². In a newspaper's readers' columns, everyday topics are likely to be chosen because contributors submit content that need not be published anonymously. Through a comprehensive investigation of common social concerns among the general public, insights were collected to inform the development of archetypal patient profiles that are currently relevant in Japan. The selection of data was based on the frequency of occurrence of keywords in newspaper articles. In this pilot analysis, "caregiving" was selected as a focal theme from among words that occurred frequently and were not directly related to medical care but were present in its peripheral domain.

Materials and Methods

The following description is based on the Standards for Reporting Qualitative Research²³.

Synopsis of the Salient Points

A qualitative approach was used as a theoretical framework to explore the inner reality of the general public. We used the general contribution section of newspapers because it is possible to obtain a large random sample from a large area of Japan. The study was conducted as a qualitative document analysis using submitted articles as text data²². The Steps for Coding and Theorization (SCAT) method was used for the analysis^{3,24}. This study was conducted using the interpretive paradigm as the predominant theoretical framework, rather than an interactional act such as interviewing. The principal investigator was a clinician and researcher in the faculty of medical education at a university. In addition to his contributions to the faculty of medical communication, he is a dedicated educator specializing in professionalism, medical history, and philosophy. He was responsible for training the simulated patients and was involved in implementing the OSCE. He has experience in qualitative research^{3,25}.

Method of Sampling from Newspaper Articles

The present sample comprised articles that were published in the Asahi Shimbun, a newspaper that features a column entitled "Voice." In this column, ordinary citizens are provided a platform to articulate their sentiments and reflections on their lives. The name of the contributor is not kept confidential at the time of submission. The theme of the submission may be free, or the newspaper may specify the theme for a special feature. These latter

submissions were excluded from the present analysis. Not all submissions are published; therefore, posts may have been biased toward a given newspaper's editorial policies or political perspective, in an attempt to ensure publication. In this study, articles from the year 2022 were initially registered as bimonthly data.

The Asahi Shimbun article database can be used for academic and research purposes, with permission from the copyright holders. If there were insufficient data to proceed with the analysis, articles from other months were added sequentially. One article comprises approximately 500 Japanese characters and 250 English words. All text data were imported into the computer-assisted qualitative data analysis software NVivo (Release 1.7.1), organized, and analyzed. The mean number of articles collected per month was 188, and a total of 1,127 articles were collected during the study. The age of the contributor was stated in all cases, and the median age was 61 (range: 6–101) years. Gender was not noted, but the authors' given names suggested that 469 were male and 570 were female; 88 were unclear. During the collection phase research assistants recorded the name, sex, and age of authors, which was obtained from the newspapers, and, to protect the authors' privacy, created a separate data file that omitted these data for the analysis. Consequently, the sex and age of participants did not affect the results of the analysis. We searched for frequently occurring words in the 1,127 articles collected. In total, 15,591 words were extracted, including those used once. The most frequently occurring words were "I," "person," "1" as a number, and "think"—1,776, 1,286, 1,112, and 964 occurrences, respectively. On the basis of these results, we elected to exclude words that were inappropriate for the study, based on certain criteria. As Bowen noted, document analysis requires data selection instead of data collection²². Kaefer et al.²⁶ reported a qualitative research methodology for newspaper articles using NVivo. To process the vast number of newspaper articles, they first select words and phrases that met their research objectives and performed the first stage of coding. Because the objective was to examine the quotidian concerns of the general public, the present study did not use this approach. In other words, we did not select words and phrases related to medical care and perform the first stage of coding, as we did not overlook the fact that education might be of far greater interest than health care. We excluded 11,384 words that occurred fewer than five times. Moreover, three of the authors reviewed the remaining words that had a frequency of five or more oc-

Table 1 Number of words per group and examples of the top 10 most frequently occurring items, by lexical category

Vocabulary classification	Abstract relations	Subjects of human activity	Human activity, mind and action	Products and tools	Natural objects and natural phenomena	Verb-like	Adjective-like
Number of words per group	99	266	455	70	58	67	39
Examples (top 10 items by frequency of occurrence)	Showa space behaviour road situation safety morning countermeasures summer spring	mother Father child school home family Ukraine world era people	war language life heart peace thoughts work feelings gender books	car television mask rice train electric train railway bus garden atomic bomb	Corona life face mountain cherry blossom mouth nature leg head chest	use write read eat pass away live teach be surprised buy ride	young difficult severe delicious kind favourite wanted beautiful heavy warm

currences and excluded 2,415 words that they determined were ineligible for analysis. These words included numbers, proper nouns, particles, auxiliary verbs, adverbs, and general verbs, some abbreviations or partially mutated notations, and proper nouns such as the names of people and places. To eliminate the effect of the researchers' subjective impressions, it was found that the selection of words and phrases that appear frequently because of the characteristics of Japanese sentences, but do not immediately correspond to the purpose of the research, could be clarified by organizing and considering them based on Japanese grammar. For example, we agreed that verbs that can be turned into adjectives, such as "grieve," can be included in the analysis but that general verbs such as "do" and "think" should not be included in the analysis. Finally, the principal investigator conducted a confirmation process, such as avoiding duplication due to synonym variation, and 1,044 words were selected for analysis. The articles in which these words appeared were used as the database for the first stage.

In this database, the most frequently used words were "mother," "war," "father," and "children"—395, 335, 292, and 291 times, respectively. The high frequency of the use of the word "war" was attributed to the high number of news reports on the situation in Ukraine and to the fact that many submissions were made during the summer in Japan. The number of extracted words, diversity of categories, and appropriateness of the analyzed words were verified by the authors, and it was decided that the number of articles collected over a 6-month period was sufficient for this study.

While narrowing down the list to the aforementioned

1,044 words, we found it necessary to examine the list in light of Japanese grammar. As mentioned above, there are words and phrases that tend to appear in sentences because of the nature of the Japanese language, and it was considered necessary to classify them based on a thesaurus. The Word List by Semantic Principles, revised and enlarged edition, was used in this study²⁷. This lexical database was developed by the National Institute for Japanese Language and Linguistics and encompasses 101,070 words and phrases. On the basis of this database, the 1,044 extracted words were classified as noun-like (948 words), verb-like (57 words), and adjective-like (39 words). Noun-like words were further classified as "abstract relations" (99 words), "subjects of human activity" (266 words), "human activity, mind, and action" (455 words), "products and tools" (70 words), and "natural objects and natural phenomena" (58 words). The number of words per group and examples of the top 10 most frequently occurring items, by lexical category, are listed in **Table 1**.

Since this study aimed to explore the elements that form the patient's background, we considered word groups that included citizens' daily concerns and life events as the subjects of study. Therefore, we selected words classified as "human activity, mind, and action" among noun-like words. Notably, 455 words were classified in this word group, of which "war" was the most frequently used, appearing 335 times. For this pilot study, we considered it appropriate to use words that are, to some extent, related to healthcare or important life events. In addition to "war," "peace" and "politics," which occurred 197 and 122 times, respectively, were frequent but not appropriate for this study. Three authors

performed the selection, and the words included in the top 50 in frequency order and considered appropriate for analysis were “nursing care/caregiving,” “graduation,” “hospitalization,” “education,” “travel,” “medical care,” and “marriage,” occurring 91, 76, 70, 63, 62, 59, and 59 times, respectively, among others. On the basis of these results, the term “nursing care/caregiving” (*kaigo* in Japanese), which appeared frequently and was in close proximity to medical care, was selected for the analysis. As it relates to the structure of the OSCE scenario, we assumed a level of “proximity” to medical care. We thought that choosing words such as “hospitalization” and “medical care” that are “directly” related to medical care itself would make it easier to approach the biological aspect in the biopsychosocial model of the patient.

Selection and Analysis of Articles

Among the 44 articles in which the word “nursing care/caregiving” appeared, 43 were included in the qualitative document analysis after excluding an article in which the word appeared in a context unrelated to nursing care or caregiving. The 43 articles were qualitatively analyzed using SCAT to generate emergent themes^{3,24}.

SCAT, which is based on the grounded theory approach, is a straightforward method for qualitative data analysis. The first author and a co-author used SCAT to analyze the transcribed material. Another co-author later joined the team to facilitate the conceptualization phase. The subsequent four steps involved segmentation and analysis of language data, such as interview recordings, free descriptions, and other relevant materials. First, notable phrases in the data were extracted (Step 1). Then, the data were translated into words other than the data (Step 2). Third, concepts such as the background, cause, and results that explain Step 2 were created (Step 3). Finally, the theme/composition concept was described based on previously created concepts (Step 4). The culmination of this process results in the formulation of a storyline that is based on a theme or composition concept. The storyline is a written representation of the potential significance of the events described in the data, primarily by combining the main categories or constituent concepts, as described in Step 4. Three physicians engaged in medical education conducted the analysis in accordance with a previously reported process^{28,29}.

Ethical Considerations

The study protocol was approved by the Nippon Medical School Ethics Committee (approval number: A-2020-

053)³⁰. Use of the Asahi Shimbun article database is permitted for academic and research purposes, after receiving explicit permission from the copyright holder. During the collection phase research assistants recorded data on the name, sex, and age of participants obtained from the newspapers but created a separate data file that omitted this information during the analysis.

Results

The strategy for establishing the background of simulated patients involves presentation of the results of a SCAT analysis, using the word “caregiver” as the target case. A total of 90 descriptions were extracted from 43 newspaper articles. The application of step coding resulted in the extraction of 8 items as the main category in Step 4 and 13 items as subcategories in Step 3. These were conceptualized by classifying external and internal factors for the present and future of caregivers, respectively.

The two primary categories identified were “work” and “society” as an oppositional concept and the outsider who retains a Confucian background, respectively, as external factors in the caregivers’ presence. Two of the internal factors mentioned were “universal regret associated with the illusion of correct caregiving” and “complex and interrelated anxiety.” External factors in the future of caregivers include “technology supporting new lifestyles” and the “caregiving profession as the third pole.” Internal factors in the future include the “care receiver’s perspective being covered” and “symbolic mental landscapes that are needed.” The [main category], <subcategory>, and number of descriptions are shown in **Tables 2 and 3**.

Representative Descriptions by Category

In the text below, square brackets ([...]), angled brackets (<...>), and quotation marks (“...”) denote the main categories, subcategories, and representative descriptions, respectively.

Work as an Opposing Concept

Balancing work and caregiving

Many caregivers have jobs, need to earn an income, and have to continue doing this; however, they think it is difficult to balance both.

“Some people prioritize their child-rearing or caregiving responsibilities.”

“I want a system that will take care of me and my family, even if we need medical help. I want a society

Table 2 Main categories, subcategories, and the number of descriptions (present factors)

Present factors	Number of descriptions
External factors	
Work as an opposing concept	
Balancing work and caregiving	4
Positive feelings about the current system and concerns about sustainability	10
Society as an outsider who retains a Confucian background	
Confucian background and old customs	7
Perspective of society as an outsider	3
Internal factors	
Universal regret associated with the illusion of correct caregiving	
The illusion of standard and correct caregiving	7
Universal regret associated with caregiving	4
Complex and interrelated anxiety	
Life events related to caregiving	9
Events that occur before and after caregiving	8

Table 3 Main categories, subcategories, and number of descriptions (future factors)

Future factors	Number of descriptions
External factors	
Technology supporting new lifestyles	
A new daily life that can be regarded in a favorable light.	7
The spread and ripple effect of technology	7
The third pole of caregiving	
The person involved, the outsider, and the caregiving profession as the third pole	10
Internal factors	
The care receiver's perspective being covered	
Tendency to rarely discuss the perspective of the caregiver.	8
Symbolic mental landscapes that are needed	
The scene that cannot be talked about without light	6

in which I can keep working even if I need to take care of someone.”

Positive feelings about the current system and concerns about sustainability

Although the people receiving care express positive feelings regarding the law and system, they are more concerned about the burden on care professionals and sustainability of the system in the future.

“On the day of the funeral, two staff members who came wearing their work clothes said, ‘We will miss your mother.’ I think my mother was happy.”

“When I saw my mother soiling herself in the bath and vomiting on the floor, I felt sorry and thought that it would be easier for the facility if she did not use it.”

Society as an Outsider Retaining a Confucian Background

Confucian background and old customs

The virtue of filial piety is believed to have been entrenched in Japan's Confucian background. The idea that it is the duty of children and family members to care for their parents or that it is the duty of women, especially daughters, to do so has become an old custom, but it exists in real society.

“My mother took care of her father-in-law and mother-in-law. Ten years after my mother-in-law died, my father needed care. My mother believed that taking care of them was her duty. My mother has been caring for my family for 30 years.”

Perspective of society as an outsider

There are various circumstances for the people in charge of care, and the measures required are different in each

case, making it difficult to make a choice. The eyes of society as outsiders who do not fully understand the difficulty of making a choice are turned toward the people involved.

“Whether you choose home care or nursing home care, I think it’s best to make your decision based on a comprehensive consideration of the level of satisfaction of both the parent being cared for and the family.”

Universal Regret Associated with the Illusion of the Required Caregiving

Illusion of standard and correct caregiving

Those involved are surprisingly aware that “standard” or “correct” care does not exist, even though society tends to believe that it does.

“Standardized care supported by scientific evidence is not always the right answer for that person. I do not think there is a single right answer to care that everyone can agree on.”

Universal regret associated with caregiving

Although they know that the existence of things such as appropriate caregiving is an illusion, the people involved feel more regret the closer they are to the person being cared for.

“I admitted my mother to a facility approximately four years ago. At first, I was relieved to be freed from caring for her, but gradually I began to feel sorry for myself for escaping that responsibility, and guilty toward my mother.”

Complex and Interrelated Anxiety

Life events related to caregiving

Many care providers are middle-aged or older. The life events of this generation are often almost intertwined, and they are prone to anxiety.

“Now that I am approaching 60 years of age, I need to start thinking of things such as caring for my parents, how I want to die, my own old age, my pension, and so on.”

Events that occur before and after caregiving

When we considered issues related to caregiving, many issues emerge, such as the declining birthrate, unmarried people, older adults living alone, and medical care for older adults.

“At my facility, we provide thorough and attentive care with minimal medical intervention. However, in the current society, in which the birthrate is declining

and population is aging, I sometimes believe that we are providing excessive life-prolonging care.”

Technology Supporting New Lifestyles

New daily life regarded in a favorable light

Although some caregivers can perceive this situation positively, even if it means having to quit their jobs or change their working patterns, society does not necessarily promote this.

“I developed a new style of working while working from home and taking care of my parents by cooperating with the care manager and staff at the day service.”

Spread and ripple effect of technology

Technology such as the use of Information and Communication Technology and robots is becoming more widespread in caregiving. However, those involved with older adults are left behind, and there are times when they believe that technology has invaded their personal space.

“We should promote the use of diverse information-sharing and digital tools in caregiving contexts rather than relying solely on handwritten memos and telephone messages.”

“I heard that the government is considering the use of nursing care robots; however, there will be some tasks suitable for humans. I believe that it will take many years before robots can take over all the detailed work that is currently being performed.”

Third Pole of Caregiving

Person involved, outsider, and caregiving profession as the third pole

The caregiving profession formed a third pole between the parties involved and outsiders.

“My mother-in-law was able to celebrate her 100th birthday this year. This is because of the hard work of the staff, who take on the heavy labor of taking care of the health and emotional stability of the residents on behalf of their families on a daily basis. Not only my mother-in-law but also those of us who are over 70 years old are supported and cheered upon by the staff.”

Care Receiver’s Perspective Being Covered

Tendency of rarely discussing caregiver’s perspective

Few newspaper contributions were from people receiving care; therefore, they are rarely discussed. It is thought that many of them do not discuss it because they recog-

nize that they are “dependent on their family and the staff.”

“I believe that the staff were speaking to the residents of the care facility in a manner similar to how they would speak to children; however, I believe that older adults, although aware of their own aging, accept the work of the young care staff with a generous heart. I am kind and compassionate for the adults.”

Necessary Symbolic Mental Landscapes

Scene that cannot be discussed without light

We think that the tendency of the person being cared for to not talk much is entrenched in Japan’s Confucian background. Conversations between the caregiver and person being cared for are sometimes discussed through the scenery in Japan. Notably, it is not a case of mutual incomprehension, but a Japanese-style conversation.

“This year, I decorated the Hina dolls as I have done in the past. There is nothing I can do for my daughter, but I hope that the Hina dolls will bring her some comfort, and when I wake up in the morning, I say to the dolls, ‘Please take care of me today, too.’ The Hina dolls have faded completely, and my daughter has already become an older adult.”

“When I saw my father smile as he gazed at the stars in the moonlight, I was inspired to be kinder toward other people.”

The story line formed from the concept is described below.

For those responsible for caring for family members, jobs that provide a living are often perceived as being in extensive opposition to caring for family members because they are compelled to be conscious of the society, who are seen as outsiders. If we trace this factor further, it is because the Japanese society retains its Confucian background. Owing to these external demands, they harbor an illusion of “correct care” within themselves, and because it is an illusion, they experience the universal regret that can occur in anyone. When they see the reality that accompanies their life stages, they are tormented by complex and interrelated anxieties regarding care. Some discover a new way of living. In this context, technology can either spread to caregiving or spill over against one’s will, although passivity and skepticism exist regarding the latter. In addition to caregivers and people being cared for, the existence of nursing care professionals is becoming more apparent in the third pole. However, the perspective of people being cared for tends to be overshadowed by their own will, as well as by their present

physical and mental state. In understanding the relationship between these three parties, individual symbolic outlooks are sometimes consciously constructed and Japanese-specific unspoken conversations occur.

Discussion

The primary conclusion of this study is that document analysis of newspaper articles submitted by the general public can help in formulating the background of simulated patients in medical education.

Document analysis, encompassing documents disseminated through mass media channels such as newspapers, is acknowledged as a qualitative research method²². Although not qualitative, Mita’s study was conducted in Japan using newspaper articles³¹. In an exploration of people’s daily concerns Kasuga et al.³² analyzed the topics of reader submissions in Japan during the COVID-19 pandemic. Among these, topics such as “family” and “the importance of humanity,” which are not directly related to COVID-19 countermeasures, were also extracted³². This study does not use qualitative research methods. However, it is possible to add a qualitative analysis as in our study.

Kaefer et al.²⁶ reported a qualitative research methodology for newspaper articles using NVivo. They started their search with a specific topic in mind and investigated whether and how keywords such as “environmental issues in New Zealand” were mentioned in the sources. This part is called deductive coding: after narrowing down the target articles, they created nodes for each frequently occurring term to further the coding. Next, inductive coding is performed after the target newspaper articles have been narrowed down. They state that they took a combined deductive and inductive approach to analyze both the volume and value of press coverage. To explore the concerns of citizens in their daily lives, we dealt with a vast number of newspaper articles. We did not use deductive coding, specifying search terms such as “caregiving,” “parenting,” or “old age” from the outset. However, our new attempt to select search terms was to use deductive coding based on the Japanese thesaurus to narrow down the search to terms coded as “human activity, mind, and action”. To analyze the volume of media coverage, the words were arranged in order of frequency of occurrence of the search terms. The final selection was made by the researcher; for example, “war” and “peace” were not selected because they do not match the current study, regardless of how frequently they appear. As Bowen²² noted, document analy-

sis requires data selection instead of data collection. In the future, there is potential for the formulation of public opinion regarding life events such as marriage and child-rearing. Alternatively, there is the possibility of achieving greater specificity in the context of medical care aimed at developing a comprehensive patient profile using terminology such as hospitalization.

To present a case study for the research methodology, we chose caregiving as the theme from the perspective of the interface between life events and medical care. The results of the storyline analysis were obtained. It is hypothesized that establishing the psychosocial background of standardized patients in the OSCE according to these eight main categories would be a beneficial approach. For instance, in the scenario for the OSCE assignment, the patient in his 60s, portrayed by the simulated patient, states that, "I have come to accept the equilibrium between professional obligations and care of my parents as a matter of course, a consequence of my social background. I am currently engaged in caring for my parents while concurrently being concerned regarding my future income and pension. However, I often regret not acting in the manner I envisioned. It was under these circumstances that I became ill, and I am now bewildered." The remaining four factors can be used for patient education. The narrative unfolds in this context. This approach was designed to promote an extensive level of empathy among medical professionals for patients.

We can provide educational experiences in the narrative domain that Wear and Varley³³ emphasized through this background context of standardized patients as an opportunity to develop habits of thought not found in evaluative simulations. The impact of the OSCE on medical students' relationship with doctors, patients, families, and other health professionals requires further investigation^{14,33}. There is debate as to why such a demanding format is used and whether it is really useful as a tool for measuring student competence^{14,34,35}. Some researchers wonder whether medical students lose^{36,37} their empathy while in school³⁸. The implementation of simulation and standardized patients in medical education is considered a factor that may decrease student empathy^{3,25}. Medical students sometimes engage in formulaic communication with patients who deviate from actual clinical practice and may not display essential empathetic attitudes³⁹⁻⁴³. Therefore, development of a comprehensive educational strategy that encompasses the creation of assignment scenarios, training of evaluators, and provision of educational experiences in the narrative domain is essential for

nurturing habits of thought and a sense of authenticity that are absent in evaluation-based simulations^{33,42}. Considering the diversity of patient profiles, in the context of OSCE, in which standardization is essential, it is beneficial to incorporate a standardized perspective of the general public in our country in the manner presented here. In daily clinical practice, it is imperative to adapt to unanticipated patient responses. The medical faculty, similar to drama, requires diversity and resourcefulness⁴³. Physicians are expected to assume roles in response to specific situations and patients, and physicians should be actors⁴⁴. An increasing inclination to incorporate improvisational theater into communication education to enhance these competencies has been observed⁴⁵. Benbassat²¹ posited that nurturing empathy and fostering medical professionalism among medical students may necessitate a shift in the common interview style. A significant percentage of clinical clerkships should transition from hospital contexts to primary care clinics, chronic care facilities, home care settings, and hospice centers²¹. It is necessary to establish simulation education that conforms to this course before clinical practice and in the OSCE. By providing a stylized perspective to the general public, this report aims to help students develop the habit of being aware of events that deviate from stylized ones. The ability to adapt to patient diversity is not a skill that can be acquired through opportunistic experience. The OSCE has been officially launched in Japan, and for the time being, it will be used as a high-stakes examination. In this context, although standardized, presenting a patient's social background in an evidence-based manner is valuable. Standardized patients sometimes participate in routine education as simulated patients and are used for training in communication and physical examination skills^{16,46}. Even in such cases, simulated patients usually need to perform according to a background that is consistent with their educational objectives. However, the social background, if not positively related to the biological background, can be somewhat generic but needs to be realistic and relevant to the actual world.

We presented a means of data collection that provides a basis for establishing this versatile background. A previous survey investigated patients who visited a medical facility to understand the life events they were interested in or had experienced⁴⁷. This is a general approach. However, it is imperative to acknowledge that these outcomes are derived from surveys conducted in specific regions or among defined age groups. Furthermore, although the attempt to use quantitative surveys to establish the patient

background may ultimately produce a statistically significant sample, they might oversimplify the complexity of patient experience. Qualitative research methods can reveal emotional factors that are difficult to distinguish when using quantitative data. The eighth primary category, titled “Symbolic Scenery Need,” provides a compelling illustration of this point.

This study explored the social background of Japan in 2022, and we acknowledge that it is subject to certain limitations. Nevertheless, using qualitative research methodologies, the processes leading to the present circumstances and future outlook can be clarified, facilitating the application of this research over an extended timeframe. This database has been constructed and is currently applicable to other themes. The declining birth rate and aging population are significant social problems in Japan and many other countries. This study further demonstrated the persistent influence of Confucian values, particularly “filial piety,” within East Asian societies⁴⁸. It would be meaningful to consider themes related to marriage and child rearing in future research.

We hypothesized that an educational approach that incorporates findings from qualitative research would nurture empathy among medical students and promote medical professionalism.

Limitations

This study has limitations concerning the generalizability of the findings, as it focused on a specific region and period to explore the background of Japanese citizens in 2022. At the time of sampling, the spread of the new coronavirus (SARS-CoV-2) was becoming more serious. Although we attempted to minimize the adoption of articles directly affected by this global pandemic, we acknowledge that it may have affected many citizens. Furthermore, it can be assumed that citizens do not or cannot submit articles to newspapers³¹. In addition, newspaper publishers may determine whether to publish an article for ethical reasons. In a newspaper readers’ column, everyday topics may be more likely to be chosen because contributors consider content that will not cause problems if their names are known to others. In view of the above, to capture more of people’s daily lives, it may be appropriate to analyze newspaper readers’ contributions³². This research requires a comprehensive understanding of Japanese and the ability to discern the subtle nuances used in general society. Notably, translating the results into English may alter understanding of the expressions used.

This research methodology explores the unknown elements of what interests people as they live their daily lives by analyzing vast amounts of textual data from sources such as newspaper articles. Therefore, in selecting the sample, we used a Japanese thesaurus and, in particular, the filter of nouns classified under “Human Activities – Mental and Action”. Depending on the purpose of the research, careful consideration should be given to how to use the Japanese thesaurus and what to select as a filter. On the other hand, we believe that careful selection and combination of these filters may yield novel findings. Further accumulation of research is required to resolve these limitations.

Conclusion

This report described the development of a new method for establishing patient background when utilizing simulated patients. SCAT analysis investigated the theme of “caregiving” as an example. To clarify the reliability and validity of this method, future studies should use the same method to construct patient backgrounds for another theme. Furthermore, to verify educational effectiveness, these background characteristics must be applied to simulated patients who then participate in an actual medical interviewing exercise. In doing so, it is imperative to consider the perspective from which to assess the learner’s performance. Both of these objectives will be addressed in follow-up reports.

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Declaration of Generative AI and AI-Assisted Technologies

in the Writing Process: The authors used DeepL and DeepL Write (www.deepl.com) solely to translate parts of this manuscript into English. No generative AI or AI-assisted technologies were used in the writing or substantive editing of this manuscript.

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