

Generation gaps in medical education: An exploratory qualitative study

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Abstract

This qualitative study aimed to explore medical students' experience of generation gap in their interactions with senior teachers (aged ≥ 55) in Japan. Focus group interviews were conducted with 28 medical students (20 to 30 years, mean age 22 ± 2 years, classified as millennials, with only one year of studies since starting specialised courses for medicine. The participants were interviewed in groups of four, with each interview lasting 60 minutes. Topics covered included generation gap experienced in daily life and during their studies, and work-life balance issues. The discussions were recorded and transcribed, and content analysis was applied. Four specific influential generation-gap categories were identified - distinctive sociocultural backgrounds, more recent educational media tools and faster information dissemination speed, new-era values, and challenges in communication - that were consistent with findings from previous studies. More senior personnel involved in medical education need to consider these categories to enhance effectiveness of teaching.

Keywords: Generation gap, Baby Boomers, Generation X, Millennials, Medical education.

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Introduction

Recent studies have described how the characteristics of sociocultural and family environments, in which the individuals are brought up, affect their perceptions, and how much they value medical professions that are unique to the era they grew up in.^{1,2} The concept of generations has been used in the context of understanding how family relationships and social class are influenced through industrialisation, democratisation and other elements characterising an era.^{1,3} Specific generations have been described in the United States, specifically the Silent Generation (1925-1945) and Baby Boomers (1945-1965),³ as well as Generation X (1965-1980) and Millennials (1980-2000).⁴

In medical education, understanding intergenerational

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differences has been claimed as an essential task in the 21st century.⁵ However, instructors from the Silent Generation or the Baby Boomer generation often fail when they attempt to educate Generation X or Millennial students; previous studies have also reported that the Silent Generation and Baby Boomers experience a generation gap.^{1,2}

This qualitative study aimed to identify relevant categories regarding medical students' experiences of generation gap in their interactions with more senior generations.

Methods and Results

This study was conducted at the medical school of Hokkaido University in Japan from December 2019 to February 2020, with third-year medical students classified as millennials. Purposive sampling was used, and students who were interested in medical education research, who cooperated voluntarily, and who agreed to be interviewed, were selected. The participants were placed in focus group interviews in groups of four,⁶ and seven such groups were formed to ensure a diverse range of views. The interviews lasted 60 minutes per group and were conducted in a sound-proof conference room to encourage free expression by the participants. Consent was obtained both orally and in writing from the participants.

The question format followed the methodology used in a previous survey.⁷ The interview included the following six topics: 1) generation gap experienced in daily life; 2) work-life balance issues between their personal life and student life; 3) generation gap experienced in their student life; 4) proposals for improvement from their generation; 5) requested improvements from the more senior generations (aged ≥ 55); and 6) ideas for using the generation gap in medical education advantageously. Whole conversations were recorded, and nonverbal and paraverbal expressions attached to their responses were also noted down.

The recorded audio data were transcribed, and data that could identify individuals were deleted. Using content analysis,⁸ the transcribed data were fragmented into common semantic groups called units, on Microsoft Excel. Per-unit edits were made for content with similar

meanings and codified to extract answers to the research questions by categories. To avoid arbitrary interpretations, the analysis was conducted by multiple researchers, and an ultimate consensus was obtained with the participation of all authors. After the analysis, the results were presented to the participants to ensure that the interpretations were authentic and based on accurate analysis. The study was approved by the ethics committee at a university (Approval no. 19-050).

A total of 28 students (aged between 20 and 30 years, mean age (22 ± 2) years) participated in the interviews. Four categories were extracted:

1. Distinctive sociocultural backgrounds

Comments were made on the social climate concerning gender minorities or the heavier share of tax burdens placed on younger generations and other issues related to social security, for example:

'The unfair treatment and uncomfortable atmosphere for minorities, such as LGBT students, has to change. (It's not just the older generations, but) people in my year also have prejudices, and it makes it harder to come to school.'

Comments were shared on ethical perspectives that were accepted in the times of the more senior generations that could be considered unacceptable now, such as,

'Today, an instructor who resorts to corporal punishment will be reported on the media. A physician of the senior generation said that it used to be easier to train residents because, back in the day, you could just give them a slap to the head but that's not the case anymore.'

2. More recent educational media and faster information dissemination

There were comments about the use of blackboard and distribution of study material on paper by the more senior generations. The students considered that they should be introducing age-appropriate technology such as PowerPoint presentations, smartphones and tablets.

'There are many people who take lecture notes on their smartphones. When older people see this, they have the impression that the students are playing with their smartphones, as if they believe that these students are playing games during lectures.'

Social networking services (SNS) are daily tools for the younger generation, and the participants' comments seemed to reflect expectations for faster information sharing.

'With regards to sending SNS messages, an older person

suggested that [we] should send emails. And I was like, email? It's a generation at the transition between emailing and using SNS, so many older people confuse these terms.'

3. New-era values

The comments seemed to suggest that the younger generation tended to value content and outcomes rather than the methods or processes in instruction.

'I think all lectures can be watched on videos. There is no longer a reason to take attendance to bind students to the classroom. (With regards to e-learning), attendance can be mailed by post. Levels of understanding can be assessed by a test. (With regards to attendance, it should suffice) to check that students viewed the video.'

Furthermore, as women are participating more actively in the work force, and gender roles have progressively shifted, it has become more important for students to value their work-life balance, and to place importance on their personal lives rather than focusing exclusively on work.

'There are things I want to do outside of work. I don't want to work so much that it puts a strain on my relationship with my family. I believe that the younger generation works hard during work hours (performing the assigned tasks as we are asked to).'

4. Challenges in communication

While some critical comments were made regarding the seemingly fixed perceptions and unspoken vague assumptions of the more senior generations in giving instruction to the younger generation, there were also positive comments that hinted at the hopes for better communication and engagement with more senior generations:

'They do not explain things well, that's why it is harder for the younger generation to do it right. If they taught us properly.... I believe that older people have their experiences, so they already understand a lot and instruct us with the assumption that we can understand it, too.'

'Ultimately, it's the older people who make important decisions. Perhaps we go against the senior generation too much. There are lots of things we can learn from the older people as well. I would like to avoid conflicts as much as possible.'

Conclusion

Four categories related to how medical students experienced generation gap were extracted from their interactions with more senior generations: distinctive sociocultural backgrounds, more recent educational media and faster information dissemination, new-era

values, and challenges in communication. These categories need to be considered carefully by more senior generations to ensure improved medical education as they educate the younger generation.

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