

An occupational therapy international summer school on Minamata disease, occupational justice, and the natural environment

作業療法学の国際サマースクール - 水俣病から考える作業的公正と自然環境 -

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Abstract: We describe an international summer school on Minamata disease held at Nishikyushu University in September 2011. Funded by the Daiwa Anglo-Japanese Foundation, the summer school was titled 'Occupational justice and the environment: Minamata and beyond' and was attended by faculty and students from Cardiff, Sheffield Hallam and Nishikyushu Universities. The summer school used problem based learning (PBL) teaching methods to encourage the participating students to think about issues relating to occupational therapy and the social and environmental determinants of health. Here we provide a brief overview and evaluation of this summer school and discuss future directions for this collaborative project.

要旨: ここでは、2011年9月に西九州大学で行った国際サマースクール「水俣学から考える作業的公正と自然環境」の実施、成果および今後の展開について報告する。本サマースクールは、大和日英基金の助成金で実施し、参加者は、イギリスのカーディフ大学およびシェフィールド・ハラム大学の両作業療法学科の教員と学生及び西九州大学作業療法学専攻の教員と学生合計8名であった。参加した学生は、問題解決学習法（PBL: problem based learning）を利用し、作業療法と健康の社会的要因について学習した。サマースクールの二日間は水俣市を見学し、水俣市立水俣病資料館などを訪問した。成果として、(1)参加者の水俣病および健康の社会的要因について理解が高まった、(2)問題解決学習法の具体的な体験ができた、(3)イギリスと日本の国際交流と理解が高まったことが挙げられる。

Key words: 問題解決学習法（PBL: problem based learning）、
健康の社会的要因（social determinants of health）、水俣学（Minamata studies）

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A summer school on the topic 'Occupational justice and the environment: Minamata and beyond' was held from September 2-6, 2011 at the Kanzaki Campus of Nishikyushu University (the University of West Kyushu) in Kanzaki City, Saga Prefecture, Japan. The summer school was made possible through funding awarded by the Daiwa Anglo-Japanese Education Foundation and was co-organised by the Department of Occupational Therapy, Cardiff University, the Faculty of Rehabilitation Sciences, Nishikyushu University, and the Faculty of Health and Wellbeing, Sheffield Hallam University. Participants included three



Fig. 1. Participants in the summer school (from left: Ueno, Aoyama, Satō, Hudson, Hamada, Sakellariou, Vane-Stobbs, Feyi-Waboso).

faculty members (Mami Aoyama and Mark Hudson from Nishikyushu University and Dikaios Sakellariou from Cardiff University) and five students (Sally Feyi-Waboso from Cardiff University, Ruth Vane-Stobbs from Sheffield Hallam University, and Takahiro Hamada, Daisuke Satō and Eri Ueno from Nishikyushu University) (Fig. 1). Table 1 provides an outline of the programme.

Learning objectives and implementation

The learning objectives of the summer school were for the participants to:

1. Explore the concepts of justice, injustice and participation, in particular as they relate to occupational therapy theory and practice
2. Using Minamata disease as a case study, to develop an understanding of the environmental, social and political dimensions of health and disability
3. To develop a basic understanding of the health systems of their respective countries (Japan and the UK)
4. To develop a basic understanding of the education and practice of occupational therapy in their respective countries

Table 1 Overview of the summer school programme

| Day | Content |
|-------|--|
| Day 1 | AM: Introductions, explanation of the aims of the summer school; student presentations on Minamata disease and on the British health system. PM: Lecture on Minamata disease by Aoyama. Public lecture by Sakellariou on 'Current understandings on the interactions between occupation, health and society'. |
| Day 2 | AM: Travel to Minamata city (180 miles). PM: Visited the Minamata Disease Municipal Museum and listened to the oral testimony by Mr. A. Kawamoto. |
| Day 3 | AM: Visited the memorial park for Minamata disease and walked around Minamata city, visiting the Chisso factory main gate, the Hyakken effluent sluice and other sites. PM: Visited one of the fishing villages that was badly affected by the disease. Traveled back to Kanzaki |
| Day 4 | AM: Brief summary of the study visit. Students summarize reflections and lessons learnt. PM: Lecture by Hudson on the context within which Minamata disease occurred. Discussion based on student's reflections. |
| Day 5 | AM: Students produce and present a collective presentation. PM: Discussion regarding the second stage of the summer school (March 2012) and planned outcomes. Official conclusion of first phase. |

The summer school was underpinned by the concept of occupational justice, which refers to the human right to participation in daily life. According to Whiteford and Townsend (2011: 68) the aim of the profession of occupational therapy is to enable occupational justice, through enabling ‘persons to participate equitably in occupations as a valued member of society’. Furthermore, the summer school adopted a problem based learning approach (PBL) to these learning objectives. PBL teaching is used by the Department of Occupational Therapy at Cardiff University at its basic teaching methodology. This summer school provided the first opportunity for faculty and students of Nishikyushu University to experience this approach to occupational therapy education.

On Day One, after introductions and overview presentations by Aoyama and Sakellariou, the summer school began with presentations on the history and current situation of the British health system (the NHS) by the two students from the UK. This was followed by discussions regarding similarities and differences with the situation in Japan. These presentations and discussions provided a concrete, data-rich topic which helped the students develop a style of inter-cultural communication in the context of this summer school. In the evening of Day One, Sakellariou gave a public lecture in Japanese on the subject of ‘Current understandings on the interactions between occupation, health and society’. This lecture was followed by a welcome party at a restaurant near to Nishikyushu University.

Days Two and Three were occupied by a field trip to Minamata and surrounding sites related to Minamata disease. The group visited the Minamata Disease Municipal Museum, the main gate of the Chisso Corporation Minamata factory, the Hyakken effluent outlet, the Minamata Memorial, the reclaimed Minamata Bay Eco Park with the Minamata Disease Cenotaph and *tamashii-ishi* soul stones, and the fishing village of Modō (Figs. 2-4).

A highlight of the Minamata field trip was the chance to hear oral testimony by a story teller at the Minamata Disease Municipal Museum. A dedicated group of story tellers provide this service on a regular



Fig. 2. The Minamata Disease Cenotaph in Minamata Eco Park



Fig. 3. The Hyakken effluent outlet from the Chisso factory, the ‘ground zero’ of Minamata disease.



Fig. 4. An Ebisu (sea god) shrine by the harbour at Modō, a fishing village with the highest number of registered Minamata disease patients.

basis, but we were especially privileged to hear testimony by Mr. Aiichirō Kawamoto, who is the son of Teruo Kawamoto, a leading figure in the Minamata struggle for justice (see Mishima [1992] for an excellent summary of Teruo Kawamoto’s work in this re-



Fig. 5. The summer school group after hearing oral testimony from Mr. Aiichirō Kawamoto (seated in the centre of the front row). A photograph of Mr. Kawamoto's parents is projected on the screen.



Fig. 6. The students preparing for their final presentation.

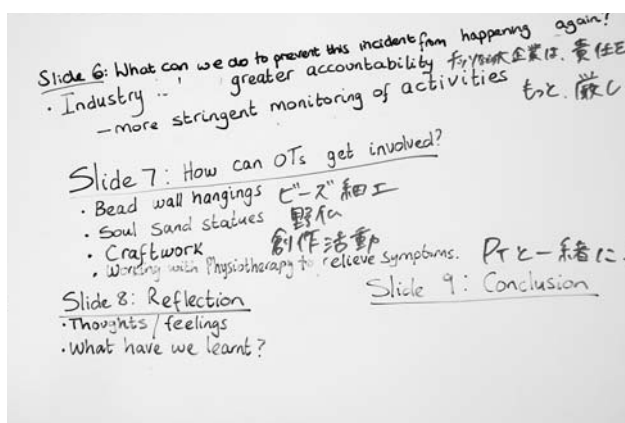


Fig. 7. The summer school provided a unique opportunity for the students to develop international communication skills through problem based learning.

spect). Aiichirō Kawamoto is an occupational therapist and speech therapist working in the Minamata area and this background made his comments especially relevant to our group. Kawamoto began his presenta-

tion with the pronouncement that 'Minamata is not a disease but a crime'. This presentation was especially important in helping the students understand the close connection between health, disability and society (Fig. 5).

Back at Nishikyushu University, on Days Four and Five the students began to develop a concluding presentation on Minamata disease using a PBL approach. By this stage it was already clear that the summer school had facilitated the development of interpersonal skills and, in particular, communication skills.

Despite the language barrier, the students succeeded in working together and producing a final joint presentation (Figs. 6-7).

Outcomes and reflections

The outcomes of the summer school can be divided into three main parts and these will be briefly presented below.

a) Educational initiative

The summer school represents an educational initiative that can facilitate not only the development of factual knowledge, intercultural understanding and communication skills, but also has the potential to impart to students the importance of the social responsibility of science. In this summer school, the students could clearly see the interrelationships between community development in the context of modernization (or industrialisation), health, disease, stigma, political activism and the role of science and, in particular, the role of medicine and rehabilitation sciences. This role was not a straightforward one as Minamata disease presented professionals with difficult ethical dilemmas.

b) Lessons from Minamata

In this summer school Minamata disease was examined as a case study. The disease can be seen as an expression of modernity, within which it became possible. Incidents such as this are not the exception but the norm in modernity, when development is measured only in financial terms. In brief, Minamata disease is a neurological condition first observed in the 1950s (officially identified as a medical entity in 1956) in and

around the city of Minamata in Kumamoto Prefecture, southern Japan, and later in Niigata Prefecture in central Japan (for further details in English see Ishimure 2003; Mishima 1992; Oiwa 2001; Walker 2009). The disease was found to be caused by methyl mercury poisoning originating from the Chisso chemical factory, which was also the biggest employer in the Minamata area and represented an important industry in postwar Japan. Issues regarding compensation continue today and people still live with a pervasive stigma associated with the disease and with the town as a whole. A walk through the town and nearby fishing villages is testament to the ongoing impact and social trauma of Minamata disease.

Minamata disease offers important lessons on many aspects of human life and activity, and in particular on the interrelationship between human occupation, society, modernity and health. Through the summer school, participants could explore and understand how the emergence of this disease became possible and its interaction with the social context. This was multifaceted. On the one hand, it was the social context with its uncritical focus on economical development that offered fertile ground for the conditions that generated the disease. These same conditions also meant that Minamata disease patients were discriminated against, not only because of their obvious deformities, convulsions and cognitive impairments, but also because they were visible testaments to the dark side of modernity and development, at a time when this was not acceptable in mainstream Japanese society. At the same time, Minamata disease provided the impetus for the development of a strong social activism movement that still survives today, albeit in a changed form (see George 2001).

Minamata cannot and should not be seen as an isolated event and parallels can be drawn with many other incidents, as for example the treatment of Ainu people by the Japanese government, or the degeneration of communities in south Wales in the post-mining period when the move from secondary to tertiary industry left many people unemployed. These deep social issues also have profound effects on public health, as has been well documented.

c) Research collaboration

This summer school was seen by all participants as the beginning of a research collaboration. The four academics participating in this project (Aoyama, Hudson, Pollard and Sakellariou) are all interested in different aspects of the interrelationships between human activity, health and the broader social, political and natural context and have already collaborated in previous publications.

A first step toward further collaboration is to write a paper describing in more detail the educational approach summarized here. A second step is to organise a panel on the theme of 'Lessons learnt from Minamata'; this will be for an anthropology, occupational therapy or occupational science audience. The students will also be encouraged to participate, and they have already expressed an interest to do so. These plans will be further discussed and developed in March 2012, when the group will reconvene in Cardiff (see below). At that stage the possibility to seek further funding to support research activities will be explored.

Conclusions and future plans

Despite its limited objectives, the Minamata summer school was extremely effective in promoting understanding of Minamata disease and the social determinants of health, in encouraging problem based learning as a pedagogical theory in occupational therapy education, and in stimulating friendship and understanding between Japan and the UK. The summer school group will reconvene in Cardiff in March 2012 with the additional participation of Nick Pollard who was unable to visit Japan for the Minamata summer school. This visit to Cardiff will offer the participants some reflection and writing time. It will also be an opportunity to explore and discuss case studies from Wales, where the complex interrelationships between society, human activity and health are, in many respects, very different from those in Minamata, yet are equally wide-ranging and consequential.

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