

Short Report

A Nationwide Survey of Practical Long-distance Swims in High Schools in Japan

Yuko FUJIWARA*, Michael KREMENIK**, Makoto TAJIMA**,
Kazuhiko KIMURA** and Hiromi YANO**

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Abstract

There have been few attempts made to conduct research into the practice of long-distance swims in schools in Japan. To clarify the investigation into the actual conditions of the long-distance swims in high schools, we carried out a questionnaire survey to national high schools (n=1,500) in Japan. The collection rate of this survey was 52.1% (n=781). The number of high schools which carried out the long-distance swims was only 1.5% (12 schools). In addition, thirty six prefectures did not carry out the swims in their schools. Interestingly, it became apparent that the areas of these schools were distributed on the coast of the Sea of Japan and the Inland Sea of Japan. The highest frequency of participating grade was the first grade. The main goals of this practice were physical and mental training, and group behavior training. The period of time and the distance for the long-distance swims were 103 ± 30 min and 0.97 ± 0.8 km. The number of students per coach was 3.7 ± 1.2 . The percentage of schools bringing medical doctor to the long-distance swims was only 1.7%. New evidence from this survey makes more clear the overall practice of the long-distance swims in national high schools in Japan.

Introduction

Many Japanese universities and colleges, which have courses in school education and sports science, have carried out long-distance swims as part of their curriculums[1,2]. This is because many students in their schools will be physical education (PE) teachers, and then they will teach swim in PE class to students in middle and high schools. However, no verification has been done on whether the program of the long-distance swims in universities and colleges is an appropriate program for future PE teachers in schools. In addition, there have been few attempts made to conduct research into the practice of long-distance swims in middle and high schools in Japan[3].

In this study, to acquire the basic data for making a wise policy of the program of the long-distance swims in universities and colleges for future PE teachers in national high schools, we investigated the actual conditions of the long-distance swims in high schools using the questionnaire method.

* A part-time teacher in the Kawasaki University of Medical Welfare

** Department of Health and Sports Science, Faculty of Health Science and Technology
Kawasaki University of Medical Welfare, Kurashiki, Okayama 701-0193, Japan
E-mail: yanohiro@mw.kawasaki-m.ac.jp

Methods

In spring 2006, we randomly selected high schools ($n=1,500$) in Japan, and then requested either the principal or the head of the P.E. department to provide the answers to some questions about long-distance swims in each of their high schools. Informed written consent was obtained from all principles in high schools. The contents in the questionnaire survey were 1) the area of each school, 2) the history of the long distance swims in each school, 3) the place of doing the practice of the long-distance swims, 4) the season and period of the practice of the long-distance swims, 5) the goal for the practice of the long-distance swims, 6) the period of time and the distance for the long-distance swims, 7) the grade and the number of students, and 8) the number of the coaching staff and medical doctors.

Results and Discussion

In this study, the rate of collected answer sheets for the long-distance swims in high schools was 52.1% ($n=781$). In this study, we have found new findings that show that only 12 high schools carried out the long-distance swim in 2005 and that only 34 high schools have ever carried out the swims (4.4%). In addition, thirty-six prefectures did not carry out the swims in their schools in 2005 (Fig. 1). It was already known that death from sea disasters in Japan were higher than that in other countries[1]. It might be necessary to do more practical long-distance swims in the sea.

In Tottori, Tokushima and Ehime Prefectures, there was shown to be a high rate of carrying out the long-distance swim in high schools. Interestingly, it became apparent that the areas of these schools were distributed on the coast of the Sea of Japan and the Inland Sea of Japan (Fig. 1). The locations could provide a safer environment than the coast of the Pacific Ocean.

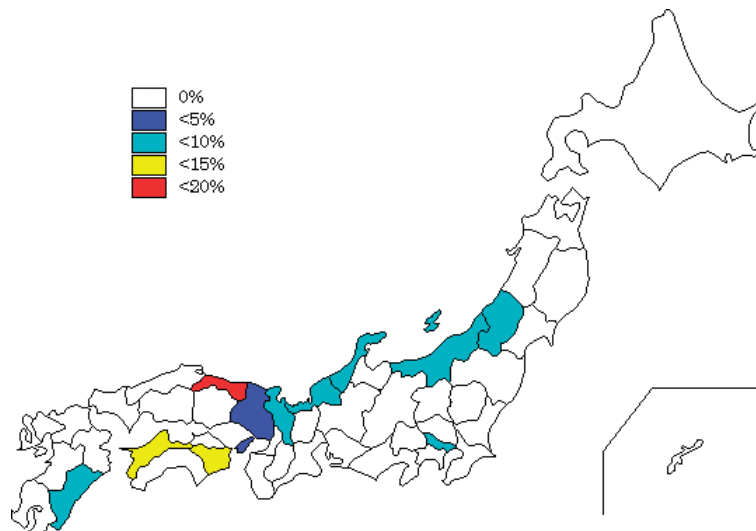


Fig. 1 The geographic distribution of high schools which have carried out a long-distance swim as one of their school events in 2005

The main goals of this practice in school were firstly physical and mental training (92%), secondly group behavior training (75%) and thirdly learning knowledge of nature (67%). In our previous study[3], the high schools, which we selected from home pages on the internet, were firstly concerned with physical and mental training (100%), and secondly group behavior training (86%). There was some similarity between the results of the present and previous studies. Thus, it was clearly shown the main goals of this practice

in high schools. Therefore, reconsideration may be needed on whether the program of the long-distance swims in universities and colleges is appropriate for educating students who can obtain the same goals of the long-distance swims in high schools.

The period of time for the long-distance swims in high school was 103 ± 30 min (mean \pm SD). Furthermore, the distance for the long-distance swims was 0.97 ± 0.8 km (Table 1). Many universities and colleges have practiced the long-distance swims for 120-180 min in their programs[1, 2]. Accordingly, this practice in universities and colleges might satisfy a requirement for the period of time for the long-distance swim in high schools.

Table 1 The period of time, the distance, the number of participating students, coaches and rate of students per coach, and the percentage of schools bringing medical doctor for the long-distance swims in high schools

Time (min)	103 +/- 30
Distance (km)	0.97 +/- 0.8
Students (n)	48 +/- 27
Coaches (n)	14 +/- 7
Students per coach (n)	3.7 +/- 1.2
Medical doctors (%)	1.7

In the practice of long-distance swims, the most important concern is safety[1]. Accordingly, the number of students per coach is also a key factor in the practice of long-distance swims. We already showed that the number of students per coach was 4.6[3]. In this study, the result is similar to that (3.7 ± 1.2 , Table 1). In addition, the percentage of schools bringing medical doctors to the long-distance swims was only 1.7%. These results suggest that safety forms a basis of the long-distance swims. If it is difficult to bring medical doctors to the long-distance swims, risk management and health check screening for students before the swims[1] needs to be considered.

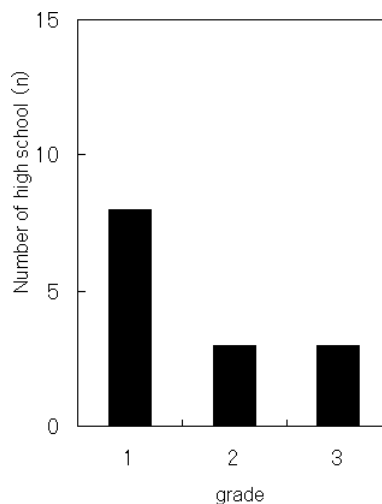


Fig. 2 The frequency of participating grades in long-distance swims in high school

The highest frequency of participating grades in high school was the first grade (Fig. 2). The result was in agreement with the previous study[3]. Thus, the practice of long-distance swims had been done in puberty or thereabouts[3].

Conclusion

In summary, we investigated the actual situation of the long-distance swims in high schools using a questionnaire survey. As for the results, the number of high schools that carried out the long-distance swims was only 1.5%. In addition, many prefectures did not carry out the swims in their schools. It soon became clear that the areas of these schools were distributed on the coast of the Sea of Japan and the Inland Sea of Japan. Furthermore, the main goals of this practice, the period of time and the distance for the long-distance swims, the highest frequency of participating grades, and the number of students per coach were more developed than before. These made clear the overall practice of the long-distance swims in high schools in Japan.

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References

1. Ikegami A, Yano H, Hoshijima Y, Nagao M, Kimura K: Safety procedures for college students swimming in the open sea. *Kawasaki Med Welfare J* 9:301–307, 1999 (in Japanese).
2. Tanaka H, Saitoh K, Sano H, Tamura M, Ochiai M, Chomabayashi T, Yokoyama N, Kimura M, Itoh N: Body temperature change during long-distance swim. *J Faculty Education Human Sci Yokohama National Univ* 3:117–123 2000 (in Japanese).
3. Fujiwara Y, Kimura K, Yano H: The research of practice on long-distance swims in elementary, middle and high schools in Japan. *The 46th ICHPER-SD Congress Proceedings* 578–580, 2005.