The Current Status of Animal Use and Alternatives in Korean Veterinary Medical Schools

Gwi Hyang Lee,1 Byung In Choe,2 Jin Suk Kim,1 Lynette A. Hart3 and Jin Soo Han1

1The Institute for the 3Rs, College of Veterinary Medicine, Konkuk University, Seoul, Korea; 2Nicholas Cardinal Cheong Graduate School for Life, The Catholic University of Korea, Seoul, Korea; 3Population Health and Reproduction, School of Veterinary Medicine, University of California, Davis, CA, USA

Summary — Two new Korean laws regulating animal welfare and the humane use of animals in science came into effect in 2008 and 2009. Both these laws impose ethical committee review prior to the performance of animal experiments in research, testing and education. This study briefly summarises the new Korean laws, and investigates the current status regarding the numbers of animals used, the alternatives to animals which are used, the curricula relating to the humane use of animals, and ethical review practices in Korean veterinary education. Approximately 4,845 animals, representing 20 different species, were used in veterinary medical education in Korea in 2007. Korea has begun to introduce formal courses on animal welfare for the humane treatment of animals used in experiments, and an ethical protocol review system prior to animal use in education. Korea is moving toward better animal welfare, by incorporating practices consistent with international standards. The information presented represents the first such data gathered in Korea, which should prove useful for monitoring the implementation of replacement, reduction, and refinement measures in animal use for education purposes.

Key words: alternatives, animal law, animal use, Korea, Three Rs, veterinary education.

Address for correspondence: Jin Soo Han, The Institute for the 3Rs, College of Veterinary Medicine, Konkuk University, 1 Hwayang-dong, Gwangjin-gu, Seoul, 143-701 Republic of Korea.
E-mail: labvet@konkuk.ac.kr

Introduction

Korea recently implemented an animal protection law (1) and a laboratory animal law (2), in line with the Three Rs principles of Russell and Burch (3). These new laws initiated requirements for protocol review by an ethical committee prior to the performance of animal experiments in research, testing and education. This study briefly summarises the new Korean laws, and investigates the current status regarding the numbers of animals used, the alternatives to animals which are used, the curricula relating to the humane use of animals, and ethical review practices in Korean veterinary education. Approximately 4,845 animals, representing 20 different species, were used in veterinary medical education in Korea in 2007. Korea has begun to introduce formal courses on animal welfare for the humane treatment of animals used in experiments, and an ethical protocol review system prior to animal use in education. Korea is moving toward better animal welfare, by incorporating practices consistent with international standards. The information presented represents the first such data gathered in Korea, which should prove useful for monitoring the implementation of replacement, reduction, and refinement measures in animal use for education purposes.

Prior to the late 1970s, the terminal use (i.e. that resulting in death) of animals in biomedical education was routine worldwide (4). By the mid-1980s, however, objections to the use of animals for this purpose began to increase, reflecting an overall change in social attitudes toward animals. Veterinary medicine has been at the centre of this debate from its early days (4). Increasing concerns regarding animal welfare and ethics among the general public also require changing practices that previously have been common in animal use, such as breeding and sacrificing animals for the purpose of education (5). These changes have been implemented via various legal and other forms of regulatory systems around the world. For example, in the UK, the Animals (Scientific Procedures) Act 1986 imposes clear responsibilities on persons with specific roles in relation to the care and use of animals in scientific procedures (6). The use of animals for teaching in veterinary schools in the USA, is regulated under the federal Animal Welfare Act (7). The World Organisation for Animal Health (OIE) now recommends the inclusion of animal welfare teaching in undergraduate and post-graduate veterinary curricula (8). Thus, the external pressure for advancing animal welfare and replacing animals in research, testing and teaching, whenever possible, is becoming greater for developing countries. These changes are manifest within academia, particularly in veterinary schools, where the use of animals by students has traditionally been relatively high (9).

In 2007, there were 10 veterinary medical schools in Korea, with 230 professors and about 3,400 students. Veterinary education involves six years of study, composed of pre-veterinary courses (two years) and veterinary courses (four years). The purpose of this report is to summarise the new Korean laws governing the use of animals in research, testing and education, to present the current status of animal use in Korean veterinary education, and to identify future opportunities to promote laboratory animal welfare in Korea.