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# A Study on Industrial Accident for Broken Prosthesis : with Focus on July 10. 2014 ruling 2012 du 20991 in Supreme Court of Korea

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#### **Abstract**

Background/Objectives: This study is to consider decision of Supreme Court of Korea to acknowledge broken prosthesis is the same with physical injury and to pay worker's compensation reimbursement following industrial accidents. **Methods/** Statistical Analysis: We analyzed the judgment of the Korean Supreme Court in 2014 of the 'Case No. 2012 du 20991', the case of cancel for disapproval dispose for care of the damaged artificial limb by the Industrial Accident Compensation in 2010. For this, we reviewed legal definition of disability and assistive device based on concerned laws and ICF model, compared prior precedents, and interpreted the final sentence of the Korean Supreme Court. Findings: We suggested the incident happened during job performance had to be counted as an industrial accident. Prostheses are in direct contact and connect with damaged body, and it may alternate deficient parts of body and restore one's body function and appearance. Artificial limbs have considerably different properties compared to assistive technology devices. So, broken prosthesis was not different from any physical injury. Intervention by professional are required to properly use prosthesis for the disabled. Prosthesis is essential products for daily life and job retention of them despite hassle of use. In work performance of the Plaintiff, Prosthesis must be judged as part of body that is responsible for core functions necessary to perform essential duties as a security guard. Korea Workers' Compensation & Welfare Service has duty to support him to continue work life and to return to work. The refusing to reimbursement for the damaged prosthesis may hinder to return to worksite of injured workers. Finally our society will make mistake of lowering the efficiency of public spending. Application/ Improvements: We support the ruling for case No. 2012 du 20991 of the Korean Supreme Court. It acknowledged the importance of assistive technology devices for participation and activities for the disabled.

**Keywords:** Artificial Limb, Disability, Industrial Accident, Prosthesis, Worker's Compensation

# 1. Introduction

Assistive technology devices are often called 'a part of the disabled body' in the field of assistive technology. Because it replaces physical form and helps to perform body functions that were previously damaged, so it can reduce functional limitation of a body of person with disabilities. Recently in Korea, there was a judgment of the incident of damaged prosthesis that occurred during working. In the trial process, legal meaning and interpretation for terms related to this event had a significant impact on the court's sentence.

In this study, we attempt to investigate meaning of a legal judgment that recognizes assistive technology devices as part of one's body.

#### 2. Method

In this study, we try to analyze the final sentence of the Korean Supreme Court's precedents in 2014 of the 'Case No. 2012 du 20991, the case of the cancel for disapproval dispose for care in 2010, and compare it with Seoul High Court's sentence in 2012. This precedent is about the deci-

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sion of whether to approve Industrial Accident Worker' Compensation of employee with disabilities who damaged his artificial limb doing his work in 2010.

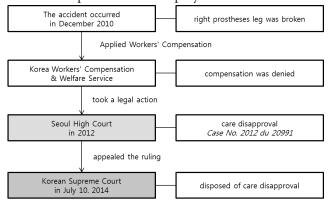
We investigated the term of 'disability' and 'assistive technology devices, the meaning of aids to social participation for disabled persons to support such a decision.

## 2.1 Definition of Related Terms Based on Laws

Prosthesis is defined as an assistive technology device by article 65 in Korean Act on 'Welfare of persons with disabilities'<sup>1</sup>. Also it corresponds to '06.24 Lower Limb Prostheses' by article 65 No. 2 and reference Table No. 1 (in directive regulation on designated items, Ministry of Health and Welfare Notification No. 2013-22, such as assistive devices for people with disabilities announced by the Minister of Health and Welfare). In notification for assistive device items, prosthesis is stated as a replacement of lost or defective parts of body. That is, we could confirm that trans-femoral prosthesis is defined as a device for substituting a thigh if there is deficient one's leg in legal aspect2.

International Classification of Functioning (ICF), Disability and Health suggests need for a multiple approach in context surrounding disabled person as an assistive device user. The ICF model offers a classification of health and health related domains. It describes the factors which affect an individual's health, and composed of function and disability (body function and structure/ activity/participation), contextual factors (environmental / personal factors)<sup>3</sup>.

**Table 1.** Graph of the case deployment over time



## 2.2 The Judgment and Incident in Fact

The plaintiff worked for an apartment building in Seoul, as a security guard. In December 2010, he slipped and fell down while cleaning up snow after a heavy snowfall. Unfortunately his right prostheses leg was broken. He applied for 'Korea Workers' Compensation and Welfare Service' with respect to the broken leg prosthesis, but compensation was denied. He filed a legal action on this incident, but the lawsuit was lost at the Seoul High Court in 2012. So he appealed the ruling to the Korean Supreme Court. As a result, in July 2014, it sentenced to cancel the disposed of care disapproval in<sup>4</sup>. The entire process of ruling on the case is presented as Table 1.

# 3 Suggestions about Case

Unlike the final judgment in 2014, Seoul High Court's sentence at 2012 has determined that injury literary means the wound of the body itself lexically. In this incident, the plaintiff had damaged only his artificial limb without physical injury. So the Seoul High Court ruled the plaintiff couldn't be included subject to medical care benefit after industrial accidents. The Judgment about care disapproval for compensation based on the following topics: prosthesis is easy detachable, and it does not correspond to any part of the body, and it doesn't completely replace the amputated body parts, so it just used to assist in the body's functions.

In contrast the ruling of the Supreme Court's precedents in 2014 of the 'Case No. 2012 du 20991' pointed out several issues related to the Seoul High Court's sentence in 2012. These issues are based on the principle of equality on Constitution of the republic of Korea, Act on the prohibition of discrimination against disabled persons, remedy against infringement of their rights, Etc., and the extent of industrial accidents and medical care reimbursement specified in Industrial accident compensation insurance Act<sup>4,5</sup>.

We analyzed the Supreme Court's precedents in 2014 of the 'Case No. 2012 du 20991' on the evidence of the ruling is based on the following 5 suggestions In this study.

## 3.1 Suggestion 1

Seoul High Court's sentence had determined that we couldn't consider broken prosthesis as a physical injury

because it assisted user's body function but not replaced it completely. But the Supreme Court has confirmed that the plaintiff was well doing in everyday life and worked as a guard wearing the prosthesis, in fact, artificial limb was functionally and physically replacing his real leg which was a part of his body. In the ruling of The Supreme Court, broken prosthesis was considered to have same meaning for injured workers when prostheses were worn for work. Therefore, it was included in the case of medical care reimbursement by Industrial Accident Compensation Insurance.

This ruling of The Supreme Court can be found on the basis of article 65 in Act on Welfare of persons with disabilities in Korea, and definition of 06.24 Lower Limb Prostheses in directive regulation on designated items, Ministry of Health and Welfare Notification such as assistive devices for people with disabilities. The definition of lower limb prosthesis specified in the applicable provisions stated as a device for replacing amputated or defected body parts of user<sup>1,2</sup>.

More specifically, lower limb prosthesis used by the plaintiff defined as device that replaced part of his leg between the hip and knee joints if you have birth defect or amputation in legs. As described above, theses definition of the laws and regulations of the Republic of Korea for the prosthesis also consistent with international standards. The 'ISO 9999: 2011' is classification criteria of items in assistive device based on International Standard Organization (ISO). It describes that '06 24 15 Trans femoral prostheses' are 'Devices that replace part of the lower limb at the knee joint after amputation'6. In other words, it is clear that the prosthesis can replace any part of the body.

As it has been discussed in accordance with the legal definition, prosthesis may alternate amputated parts of body. Therefore, parts of body and prostheses to restore one's body appearance and function are not different from each other for people with disabilities. Thus, the Supreme Court was able to determine that the Seoul High Court's sentence in 2012 was wrong in it is judgments that prosthesis assists someone's body function, but doesn't replace it completely.

#### 3.2 Suggestion 2

Another grounds for the ruling of Seoul High Court in 2012 is that the prosthesis is easily removable just like glasses, wheelchairs, or canes. Therefore, artificial limb is not a body part, and broken prosthesis can't be considered an injury. But prosthesis(in particular, lower limb prosthesis in this study) is in direct connect and contact with damaged and sensitive body, so it has different properties compared to other common assistive products like eyeglasses, crutches, wheelchairs, etc. Therefore, artificial limbs have completely different properties comparing to assistive products that can be removed easily, and easily used by people with disabilities.

In addition, interventions are required to properly use artificial limb for people with disabilities by skilled and certified or licensed professionals such as doctors, prosthetists. In Article 69 ~ Article 78 in Act on Welfare of persons with disabilities, prosthetist and orthoptist are regulated to be qualified as specialists for dealing with prosthesis and orthotics through national examination (Article 71 to Article 74). And the 'will-aids article' qualifications acquired through national exams for professional staff to handle the commitment, walkers regulations (Article 71 to Article 74). In addition, it is stated that prosthesis and orthosis should be manufactured or adapted in accordance with the doctor's prescription in the same law above mentioned<sup>1</sup>. It is contemplated that prosthesis and orthosis can have a profound impact on the health and condition of persons with disabilities to perform the task. Because prosthesis and orthosis applied directly to one's body, so it can cause secondary disabilities such as pain and physical damage while it was improving body appearance and compensating a loss of functions due to amputation.

People with disabilities are dependent on prosthetists to mount prostheses on their amputated body part, despite cumbersomeness of use in these aspects. If there is another alternative that can replace the physical functions of person with disability, for example, glasses, crutches, and wheelchairs, so they won't have to choose the discomfort and painful means for use. Thus, the use of prosthesis or orthosis is the inevitable way to replace the function of people with disabilities in modern medical technology. In other words, prostheses are essential products for daily living and reinstatement of people with amputations. Therefore the Supreme Court was able to conclude that the ruling of Seoul High Court was unfair, because it was a judgement based on the fact that detachable prosthesis was not part of the body.

## 3.3 Suggestion 3

The third suggestion of the Supreme Court for work performance of the plaintiff, 'Prosthesis' must be accepted as part of his body that is in charge for core functions necessary for performing essential duties as a security guard. This is also associated with the definition of disability that it is regarded as the basis for decisions whether to include the subject for the payment of reimbursement of workers' Compensation Insurance in case of industrial accident. Previous ruling was recognized as the physical injury only that caused damage that led to any disabilities of body in the Seoul High Court at 2012.

But we already discussed above that the perspective on disability has been changed. These changes are well shown in the provision for disability in International Classification of Functioning (ICF), Disability and Health of World Health Organization (WHO). It is composed of a variety of factors to determine disability status, such as components affected an individual's health, and composed of function and disability (body function and structure / activity / participation), contextual factors (environmental / personal factors)<sup>3</sup>.

According to this concept, the plaintiff's broken prosthesis can be recognized as a state in which a disability has occurred to him, because he needed lower limb prosthesis to replace his body functions and structure, skills to perform his work as a security guard. According to vocational dictionary published by the Ministry of Labor and Employment, security guards are described in the job classification Code 1120. And it explains that security guard is required to possess certain abilities to perform the duties for this profession, such as 'physical strength, flexibility, balance, motor control, fast response time and speed'<sup>7</sup>.

If the plaintiff has injured his right leg and can't repair his artificial limb, he may be unable to use his capabilities and perform demands of his job as security guard. Job requirement for a security guard that requires as mentioned above physical strength, flexibility, balance, motor control, fast response time and speed. As a result, he will be defined as a disable in accordance with the concept of ICF based on above explanation because he experiences difficulties in performing his own vocational function.

We must pay attention to the fact in this case that the usage of the prosthesis before industrial accidents function as the plaintiff's biological body function necessary to engage in his duties. For working consistently as security guard, his prostheses that replaced his injured body parts must continue to function properly. So that he can be in a functional state and to be engaged in the job by using his prosthesis. In other words, normal condition of

the plaintiff's artificial limb can bring him a functional state without disability specified in ICF.

## 3.4 Suggestion 4

The Supreme Court had proposed a judgment on the role of the defendant in accordance with the provisions of Industrial accident compensation insurance Act in the fourth.

'Korea Workers' Compensation and Welfare Service' has a mission to assist the plaintiff to continue his work life to come back to previous work site as a defendant in this ruling for achieving basic mission that is social reintegration and rehabilitation of injured workers. The purpose of establishment for 'Korea Workers' Compensation and Welfare Service' is clarified in Article 10 of the Industrial Accident Compensation Insurance Act. This service has managed and installed industrial accident compensation insurance facilities needed to promote social reintegration and rehabilitation of injured workers result from industrial accidents. It contributes to protection for workers by performing project efficiently for industrial accident prevention and improving welfare of workers depending on Article 1 in the same law<sup>8</sup>.

The best way to achieve the established objectives of 'Korea Workers' Compensation and Welfare Service' is to support injured workers to return to the former job site they had before industrial accident. To achieve this goal, Korea Labor Welfare Corporation has disclosed that provision of a vocational rehabilitation services to assist for 'returning to before-accident work, re-employment, and entrepreneurship through the website dealing with the rehabilitation support services and rehabilitation counseling as a main business<sup>9</sup>. Prosthesis will play a significant role in his successful vocational rehabilitation. If he couldn't perform body function smoothly because of broken artificial limb that means possibility is lowered to return to the original job before accident, as a guard in this case.

When the plaintiff is unable to use his own custommade artificial limb due to the damage of prosthesis, it increases the burden need to explore new career for him in our society that does not require a lower extremity function. This pressure may cause a paradoxical structure that will make us need to seek additional rehabilitation plans for him after the plaintiff was degraded to incompetent person who had been competent in the past. While avoiding this contradiction of plaintiff, the easiest and

preferred way to maintain and facilitate his independent living through job is to support the return to original work of the injured worker. This is also unique purpose of the project of Korea Labor Welfare Corporation as a defendant. Thus it is necessary the approval of the reimbursement payment for the damaged prosthesis for this.

## 3.5 Suggestion 5

Finally, the Supreme Court pointed out that it would be a mistake to reduce the cost effectiveness of public expense in our society if the plaintiff was unable to continue his professional work.

As identified in suggestion 4, the support for a broken prosthesis will be able to reinstate as a worker in one's post and to keep the job. He will work successfully, and receive a salary in exchange for working, and pay taxes. In other words, he will be able to perform the duty as a taxpayer. In contrast if the plaintiff does not receive the appropriate action on the damaged prosthesis, the opportunities of his work will be limited. Assuming that he deserved to not get a job because the plaintiff was limited chances of his career, Korean government and society should support funding for making the plaintiff's living by the workers' compensation insurance or basic livelihood security against pensioners for a long time. As a result, we can foresee spending a greater welfare budget than giving to him again with the artificial limb.

Eventually expenses spent on grants for maintenance of basic livelihood are estimated to be greater than the amount necessary to support the prosthesis for job security. On the other hand, the plaintiff himself may be deprived of an opportunity of self-realization through independence and work life, and it is expected to decrease quality of life. The employment and availability of work for physically disabled person has an productive effect on life satisfaction<sup>10</sup>. After all, the efficiency and value of the total national budget will be significantly undermined and the awareness of the welfare status of the country will also be seriously threatened.

In addition, the Supreme Court ruled to consider a variety of aspects and situations that might be encountered with people of disabilities in the future, such as employers may have the opportunity to avoid the employment of people with disabilities who wears artificial limbs, if the broken prosthesis aren't recognized in industrial accidents, and excluded from the coverage in Korea Workers' Compensation & Welfare Service.

This ruling have the means the Supreme Court stated that the duty of national and local governments in accordance with the provisions of Article 6 and Article 3 in Act on Employment Promotion and Vocational Rehabilitation for disabled persons' and to fulfill the Korea Workers' Compensation and Welfare Service<sup>8,11</sup>. In the first section of Article 6 (efforts for independence of people with disabilities and so on), it is defined persons with disabilities just have to be with the self-awareness as a profession, and to improve and develop the capability of themselves, and try to be independent as a competent professional. And it has specified that national and local governments are required to take actions for the vocational rehabilitation taking into account characteristics of the employers, people with disabilities as the employee, and supports for other parties, and they must push the policies that are needed to promote employment of people with disabilities in the second section of Article 3.

#### 4. Conclusion

In this study, we conducted a logical verification of legal validity of the terms commonly used as 'same means of the body part for disabled person' through reviews for the 2012 du 20991 judicial precedent.

As we discussed earlier, the ruling of Seoul High Court's sentence in 2012 had made a few errors. First, it interpreted that the range of disability to be dealt with workers compensation reimbursement was lexically judged within bounds for physical injury. That means only those who have physical injury are disabled. Therefore the plaintiff was determined not to be the subject to workers' compensation reimbursement. Second, they didn't judge to replace body functions completely with an artificial limb but to assist it because it can be detachable easily.

But the Supreme Court's precedents in 2014 of the 'Case No. 2012 du 20991' had determined that this preceded decision was wrong on the basis of 5 suggestions. First, we must consider that his prosthesis replaces a part of the body because the plaintiff engaged in a good work and everyday life using the prosthesis before the accident. The second suggestion is that the judgement do not appropriate, the reason for this is based only on the fact prosthesis can be removable. We must be careful in determining whether we regard prosthesis as a part of the body or not. Third, it is in need of lower extremities normal function for performing the plaintiff's job duties sufficiently as the security guards. His artificial limb replaced function of leg well. The ruling of the Supreme Court as a fourth emphasized the suggestion that Korea Workers' Compensation and Welfare Service has an obligation to actively support people with disabilities to return to the original job, such as the plaintiff with disability. Finally, it is that total social costs will be increased more and more if we do not pay for artificial limbs in our society. If the plaintiff's work life is not sustainable, our society will make mistake of lowering the efficiency of public spending.

In this study about the Supreme Court's precedents in 2014 of the 'Case No 2012 du 20991', we interpreted the basis of the judgment as follows:

- The first is that the thigh prosthesis is stated as a device to replace some body parts (legs or feet) in a defined part of the Lower Limb Prostheses in directive regulation on designated items based on Act on Welfare of People with Disabilities<sup>1,2</sup>.
- The second is the difficulty of using the artificial limb in a different way, such as surgery or transplant not detachable and attachable with the current technical level in medical science. In addition, according to Act on Welfare of People with Disabilities prosthetist and orthoptist is certified with qualifications are in charge of production and wear of prosthesis depending on the prescription of the doctor. So that it is not reasonable that the prosthesis is not a part of the body for reasons it is removable like as eyeglasses, wheelchair and crutch etc.
- The third is that definition of a Disability is not only to determine the structure and function of the body, but it should be determined in a complex relationship of activities and contexts the plaintiff work as a security guard, and function in charge of prosthesis in related to the job performance as described in the concept of the ICF.
- Fourth, it has imposed a duty the defendant Korea Workers' Compensation & Welfare Service on social integration through the support for return to original work for injured workers in Industrial Accident Compensation Insurance Act<sup>7</sup>.
- Finally, national will be spending a larger welfare costs such as cost of living assistance if the plaintiff did not return to the original work, which would cause problems in the various dimensions,

that is, degrading the quality of life, making the country's budget inefficiently and so on.

As a result, artificial limbs and assistive technology devices were stated as means to integrate individual's body function and structure, to enhance participation and activities for disabled persons and to minimize environmental and social constraints with disability paradigm shifting that emphasizes participation.

In this respect the Supreme Court's precedents in 2014 of the 'Case No. 2012 du 20991' can be considered as very significant ruling judged based on the social model of disability issues and acknowledged the importance of the function and role of assistive technology devices.

# 5. Acknowledgment

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