Sociological histories on epilepsy as "causes for disqualification" stipulated in the Japanese Road Traffic Act of 1960 and Revised Road Traffic Act of 2001

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Abstract. – In the wake of successive cases of fatal accidents caused by patients behind the wheel whose driving was likely to be hindered due to paroxysmal diseases, including epilepsy, there has been an outcry from victims demanding stricter criminal penalties against the perpetrators due to negligence. As a result of this action, a revised Road Traffic Act was put into effect in Japan on June 14, 2013. This act established new penal provisions against any person who provides false statements on his/her medical condition(s) when acquiring or renewing a driver's license.

In this paper, the social circumstances will be introduced regarding road traffic in Japan when the Road Traffic Act, the origin of today's revised Road Traffic Act, was enacted in 1960. An overview of the reasons behind the enactment of the original act will be provided. Additionally, the handling of patients with "provi-sions for disqualification," whose driving is like-ly to be hindered due to paroxysmal diseases, including "epilepsy," will be reviewed. This handling attracted repeated controversy during the enactment of the original act and will also be reviewed. One significant change in wording from "absolute causes for disqualification" in the Road Traffic Act of 1960 to "relative causes for disgualification" in the Revised Road Traffic Act of 2001 also will be discussed from a medical sociology perspective. Finally, the social status and socio-economic position of drivers with paroxysmal diseases, as it pertains to influences on lawmakers, will be discussed.

Key Words:

Epilepsy, Automobile accident, Road traffic act, Revised road traffic act, Road traffic control act.

Introduction

In recent years, several evidence and investigative research on driving a car by a person with epilepsy have been reported¹. According to it, it has been proved that antiepileptic drugs are taken and the recurrence rate of seizures in people without epileptic seizures for about 2 years is low. Following this, since the 2000s, laws on driving licenses for people with epilepsy in each country advanced². In the QOL such as driving licenses³, social employment⁴, play sports⁵ and others of people with epilepsy, it is a big concern whether the driving of the car is possible or impossible, and whether there is legal maintenance for driving. In this review, we outline the historical transition of legislation for people with epilepsy in Japan to obtain driver's license with literature review^{2,6,7}.

Overview of Enactment of the Road Traffic Act

Thanks to the growth of automobile use, caused primarily because of the postwar economic growth of Japan, not only had the number of automobiles in use increased, but also the number of fatalities from traffic accidents increased substantially during the latter half of the 1920s. This is known as the Showa Era. Decades later, the number of registered automobiles increased from just over 200,000 in 1948 to 1 million in 1953 and to more than 2 million in 1957. When motorized bicycles are included, the total registrations reached more than 3 million. In 1957, nearly 920,000 motorized trucks more than 2 million automobiles. These trucks were driven on ordinary roads all over Japan, many of which were insufficient as part of a good traffic infrastructure. In those days, more than 1 million motorized bicycles were used as a major means of transportation for the general public.

Under such inferior traffic circumstances, including poor road conditions, undeveloped traffic safety facilities and other factors, the number of traffic accidents kept increasing. While the total number of traffic accidents with injuries or death had been 93,869 (6,374 killed and 72,390 injured) in 1954, that number rose to 168,000 (8,248 killed and 145,000 injured) in 1958. This indicated that the number of the people injured or killed had risen nearly 79 percent over four years. The number of people killed in traffic accidents started to increase sharply after 1948, when the current statistical system launched in Japan. Annual deaths rose from over 4,000 in 1948 to over 5,000 in 1950. In 1960, they rose to over 10,000, when the Road Traffic Act was enacted. Furthermore, since 1960, such deaths have continued to rise. Although the number of fatal accidents decreased by a small margin temporarily in 1963, the number of people killed increased to 16,765 in 1973. This was the worst year ever since the launch of Japan's statistical system.

Overview of Enactment of the Road Traffic Act of 1960

In 1960, the Road Traffic Control Act was repealed as the Road Traffic Act was established.

As for laws related to traffic enforcement, the Road Control Ordinance and Automobile Control Ordinance existed before World War II, which began in 1941. Conversely, the Road Traffic Control Act and Road Traffic Control Ordinance (Interior Ministry Ordinance) went into effect after the war. Among others, the Automobile Control Ordinance established in 1933 had been the foundation of regulations such as the Road Traffic Control Act and Road Traffic Control Ordinance. Much of its contents also was brought into the Road Traffic Act. Now, the Traffic Control Ordinance is the fundamental law of road traffic that is observed for people and vehicles to use roads safely in Japan.

Before establishing the Road Traffic Act, the National Police Agency started developing a new bill at the beginning of 1957.

September 1957 Milestones

The "Outline of Revision in Road Traffic Control Act" started to be prepared as a response to the "Outline of Measures to Prevent Traffic Accidents," which had been presented by the government to the public. The principle reason for this revision in the proposed outline is as follows in this 1957 bill: "Considering the current state of road traffic in these days and for the purpose of dealing with future road traffic and enhancing the measures that seek hazard preventions and smooth traffic on the road, the authorization of control and regulation shall be intensified; penalties strengthened; and the law system organized.

The purpose of the Road Traffic Control Act and the Road Traffic Act are herein compared as follows:

Materials

Road Traffic Control Act (1947)

Article 1. The purpose of this Act is to secure hazard prev.entions on the road and other traffic safety.

Road Traffic Act (1960)

Article 1. The purpose of this Act is to secure hazard preventions on the road and other traffic safety and smooth traffic.

Comparing the purpose of the Road Traffic Control Act with that of the Road Traffic Act, it is evident that both sought to achieve "hazard prevention on the road." However, the Road Traffic Act intended to secure traffic safety, smooth traffic flow and prevent disturbances due to road traffic. In addition, the act contained stipulations for pedestrian traffic ways; vehicular and tram traffic ways; obligations of drivers and employers; road use; drivers licenses; training courses; and fine systems for drivers of automobiles and motored bicycles. During high economic growth, the rapid development of roadway systems never stopped. In accordance with the traffic circumstances at the time, which had undergone accelerated change, more detailed provisions were incorporated to secure safe and smooth traffic flows. The further organization of laws and regulations was started to include the strengthening of authority to enable police officers to take measures for hazard prevention, the preparation of provisions concerning vehicular traffic, the prohibition of drunk driving, the intensification of penalties against the serious violation of laws and regulations, the enhancement of administrative actions regarding drivers licenses, and the handling of legal violations by juveniles as drivers of automobiles (exclusion of the application of the Juvenile Act).

December 1958 Milestones

Using the "Proposed Outline of Revision in Road Traffic Control Act" as a basis for discussion, considerations were given to the respective viewpoints of the National Police Agency, the Metropolitan Police Department and other prefectural police departments. Among the considerations that were presented as "Matters to be Addressed in Preparing for Proposed Outline of Revision," there were proposals as follows:

- 1. Because of the variety of contents, they should be categorized and organized into a few laws: added by the establishments of "Traffic Regulation Act" on traffic regulations and "Driver License Act" concerning driver licenses, "Traffic Laws" shall be organized as a compilation of the three Acts.
- **2.** Due to regional differences in actual conditions of road traffic, special laws should be enacted.

Although the above two proposals were never passed, they were considered several times thereafter.

January 1959 Milestones

The "Proposed Principle of Revision in Road Traffic Control Act" was prepared. This law had been newly set up by adjusting the accumulated results of year-long discussions based on the "Proposed Outline of Revision in Road Traffic Control Act."

The principles of revision are stated below.

To cope with the development and transformation of traffic circumstances nowadays and the further complicated traffic circumstances expected in the future, a full-scale revision shall be made because a partial revision is no longer enough to deal with them. Along with this, the contents of stipulations shall be contemplated with considering, besides with using law and regulations of foreign countries as references, the relation to 'Convention on Road Traffic' that is scheduled to be acceded in the near future.

Among the items to be revised pursuant to these principles, representative ones are as follows:

- **1.** To change the name to "Road Traffic Act" by removing the word of "Control";
- **2.** To simplify the terms as much as possible for the laws and regulations to become more familiar with;

- **3.** To organize in preparation for the accession to "Convention on Road Traffic";
- 4. To make it possible for National Public Safety Commission to conduct the traffic regulations on its own discretion regarding the national expressways as nationwide arterial roads, the motorways across the prefectures and important first-class and second-class national highways;
- **5.** To clarify the authorities of police officers on traffic controls and seek strengthening of them;
- 6. To examine the details of the prohibited acts on the road and specify legislative regulations on them;
- **7.** To consider the traffic ways with vehicles etc. and at the same time intensify the penalties for the malicious violation of laws and regulations; and
- **8.** To set up a system where a civil fine is able to be collected by the speedy procedure for a minor violation of laws and regulations.

August 1959 Milestones

The National Police Agency had developed final versions of the "Principle of Revision" and "Proposed Outline." Besides being a legal framework, the "Proposed Outline" provided the following:

- The protection of pedestrians (to clarify traffic principles for them)
- Stipulations on hazard prevention (to specify the definition of "driving under the influence of alcohol" and about the use of the road)
- Provisions concerning the roadways (especially concerning parking and stopping and measures for improving the current chaos)
- Provisions about traffic regulations (to establish the definition of the term "road signs" and to regulate minimum speed)
- Driver license systems
- The responsibilities of employees
- Penalties (In addition to strengthening penalties for serious violations, special penalties shall be stipulated for death or injury and accidents causing damage to buildings, etc. Penalties shall be aggravated for drinking while driving.)

After five months of examination by the Cabinet Legislation Bureau, from September 1959 to February 1960, the Road Traffic Act was submitted to the Diet (Japanese Parliament).

Comparison of Handling of Epilepsy in Provisions for Disqualification Between the Road Traffic Act and Revised Road Traffic Act

Provisions for disqualification in laws refer to those which impose certain restrictions on a person with respect to his/her occupational choice and qualification acquisition due to his/her individual disorders and social circumstances. The provisions of causes for disqualification regarding automobile drivers licenses of people with epilepsy set up in the two kinds of Road Traffic Acts. The absolute causes for disqualification in the Road Traffic Act of 1960 as it was established are stated below:

Materials

Road Traffic Act of 1960

(Causes for Disqualification of Driver License) Article 88

- 1. A driver license may not be provided to a person who falls into any of the following items: (1) persons less than 18 years of age as it concerns a large-sized motor vehicle license (including a provisional license for large-sized automobiles), an ordinary motor vehicle license (including a provisional license for ordinary automobiles) and a license for specialized vehicles; persons less than 16 years of age as it concerns a license for motored tricycles (including a provisional license for automatic tricycles), a license for motorcycle, a license for light motor vehicles, a first-class license for motorized bicycles and a second-class license for motorized bicycles; (2) mentally ill persons, mentally retarded persons, persons with epilepsy, visually impaired persons, hearing-impaired persons or deaf-muteness persons; (3) persons with a physical disability stipulated in laws other than those listed in the immediate preceding item; (4) persons addicted to alcohol, narcotics drug, cannabis or stimulants; or (5) persons whose license have been rescinded less than 1 year from the day of rescindment pursuant to Article 103, Paragraph (1) or those whose license are being suspended.
- 2. No one may not receive the same kind of license as he/she currently possesses. Provisions for disqualification stipulated in 1960 that a driver's license may not be provided without any exception to "mentally ill persons, mentally re-

tarded persons, persons with epilepsy, visually impaired persons, hearing-impaired persons or deaf-muteness persons." (Article 88, Paragraph (1), Item (2) (absolute disqualification).

The moves toward the revision of provisions for disqualification were initiated in1999. In August 1999, Task Force on Policies for the Disabled issued a decision titled "On Revisions of Provisions for Disqualification Regarding Disabled Persons," and the subsequent status is now as follows

Materials

Road Traffic Act after Revision in 2001

(Refusal of License, etc.) Article 90

A Public Safety Commission is required to provide a license to the person who has passed the driver license test (limited to those who took the aptitude test related to the said driver license test less than 1 year before passing such driver license test as concerns a first-class license and a second-class license; less than 3 months as concerns a provisional license) stipulated as in Paragraph (1) of immediately preceding Article; provided, however, that a person falling under any of the following items may not, pursuant to the standards set forth in the Ordinance, be provided a license (excluding a provisional license; The same shall be applied to this Paragraph through Paragraph (12).) or may be withheld a license within the extent of 6 months.

- **1.** The persons with any of the disorder listed below:
 - **a**. mental disorders with the symptom of hallucination that are listed in the Ordinance;
 - **b.** disorders causing consciousness disturbance or motor disturbance with a seizure that are listed in the Ordinance; or
 - **c.** disorders listed in the Ordinance that are likely to impede the safe driving of automobiles, etc., other than as prescribed in (a) and (b).

In contrast to "'absolute disqualification,' which means not providing a license without any exception' as it was stipulated in 1960, the above is defined as "'relative disqualification," which refers to judging according to "each individual's capacity." Epilepsy falls into "(b) disorders causing consciousness disturbance or motor

disturbance with a seizure that are listed in the Ordinance." Guidelines for judgment and other factors on drivers licensing concerning epilepsy are as listed below.

Epilepsy (Regarding Article 33-2, Paragraph (2), Item (1) of the Ordinance)

- **1.** Refusal, etc., are not allowed if any of the following is applicable:
 - **a.** If a seizure has not occurred within the last 5 years and a doctor has made a diagnosis to the effect that a seizure is not likely to happen from then on;
 - **b.** If a seizure has not occurred within the last 2 years and a doctor has made a diagnosis to the effect that a seizure is not likely to happen about within the next X years;
 - **c.** If, after a watchful waiting for 1 year, a doctor has made a diagnosis to the effect that a possible seizure is limited to a simple partial seizure without consciousness disturbance and a medical condition is not likely to become worse from then on; or
 - **d.** If, after a watchful waiting for 2 years, a doctor has made a diagnosis to the effect that a possible seizure is limited to a seizure occurring during sleep and a medical condition is not likely to become worse from then on.

Note: In a case where: If a seizure has not occurred within the last 2 years and a doctor has made a diagnosis to the effect that a seizure is not likely to happen about within the next X years;" is applicable, a special aptitude test shall be conducted every X years.

In short, the three conditions under which an epilepsy patient is allowed to obtain a driver's license can be summarized as follows: (1) "A seizure will not reoccur"; (2) "Even if a seizure reoccurs, it will not bring about consciousness disturbance or motor disturbance"; and (3) "A seizure reoccurs only during sleep." Epilepsy is a disorder that can be controlled with medicines and varies considerably between individuals. For example, there are epilepsy patients who experience a seizure just once every two years and then there are those who experience a seizure nearly every day. The reality is that most patients enjoy a social life that is no different than that of ordinary persons. It can be said that, under the revised Road Traffic Act, the judgment shall be based on respective cases while paying attention to such individual differences.

Discussion

The Road Traffic Act has, after experiencing several partial revisions since its issuance of 1960, come to what it is today while maintaining its basic legal framework. The issuance year was the same year when the Ikeda Cabinet announced the "Income Doubling Plan" that aimed for high economic growth. In the more than 55 years since the law was passed, vehicles have been transformed from moving objects, which had been originally developed since the Meiji Era for entertaining peerage and imperial family and for the Japanese Army to use them for the war, into imperceptibly "passenger vehicles" and "pri-vate vehicles" that are social instruments used for general citizens to pursue convenience. Now, in the context of the usage of vehicles as instruments by general citizens, the stipulations enshrined at the time of enactment in 1960 are going to be reviewed. Of such stipulations listed, "(ii) mentally ill persons, mentally retarded persons, persons with epilepsy, visually impaired persons, hearing-impaired persons or deaf-muteness persons," are absolute causes for disqualification. A law under which mentally ill persons, mentally retarded persons, hearing-impaired persons, deaf-muteness persons and epilepsy patients are handled with the same standards, without any flexibility is and when viewed from the perspective of today's medical insight, should be considered an oddity.

At present, the diagnosis of mentally ill persons has changed to "integration disorder syndrome" in certain medical circles in Japan. Mentally disabled persons would be considered intellectually disabled people or people with developmental disabilities. Hearing-impaired people and deaf-mute people are nominal designations in Japan that refer to physically disabled people who have difficulty concerning the function of a part of their bodies. More specifically, "epilepsy" is a general term for pathological conditions where various types of seizures occur due to the brain's chronic electrophysiological abnormality. The spectrum of epilepsy, in terms of its degree of severity, covers a broad range. These conditions range from patients who are not required to take medicines or hindered in everyday life to serious cases where patients suffer severe impairments in psychomotor development and therefore are classified as having severe disorders.

Looking back with today's perspective, the Road Traffic Act prepared in 1960 was characterized by the fact that it dealt with all of the above mentioned disorder groups in a single uniform way, instead of handling them individually, and defined them as "absolute disqualifications." The contents of the act ignored the fact that individuals should be respected by being given considerations to their aptitudes for driving according to their respective degrees of severity of disorders and clinical conditions. It cannot be denied that, when using modern standards, the legal disparities in human rights or the discrimination against people with these disorders would even exist as social debates today. After more than four decades since 1960, in 2001, the same stipulations applied to the same matters in the Revised Road Traffic Act. With the revised act put into effect, the stipulations of "absolute disqualification" transitioned to causes for "relative disqualification" associated with respective clinical conditions.

Epilepsy patients and others with similar conditions have built strong advocacy groups since 1960 that help ensure the rights of these people are equal in all parts of society. These groups also serve to enlighten legal and regulatory bodies about the various social disadvantages that these people have gone through in the past to help ensure similar disadvantages are not placed on them in the future. The Association of Parents with Children with Epilepsy and the Association to Protect Epilepsy Patients were set up in 1973 and 1976, respectively. These two associations, by cooperating with each other, initiated the activities for improving the social disadvantages and addressing various concerns and social problems that epilepsy patients and their families were facing.

The first half of the 1970s was a period when the protection of human rights and livelihood supports for persons with various disorders and disabled persons were strongly advocated and drew international attention. At the time, the United Nations started to make resolutions and spread enlightenments in relation in the promotion of policies for the disabled. In 1976, it designated the year 1981 as the "International Year of Disabled Persons." Additionally, the United Nations required member countries to submit their current efforts with the policies for the disabled by such year. Following this requirement from the United Nations, the government of Japan, with a view toward promoting relevant policies by such year, advanced various revisions by adopting the "On Implement Measures for the International Year of Disabled Persons" at a Cabinet meeting in March 1980. This began the launch of the Task Force on the International Year of Disabled Persons at the General Administrative Agency of the Cabinet. The International Year of Disabled Persons was not only successful in promoting the understandings of the disabled, but became an opportunity for organizations and advocacy groups for the disabled to work cooperatively.

Following these trends, the Japan Epilepsy Society (JES) was established as a result of the integration of the two epilepsy associations previously noted. The new organization was authorized by the Health and Welfare Minister. The establishment of this new and effective advocacy group was widely credited to the International Year of Disabled Persons in 1981 and United Nations' support activities. JES further pushed the comprehensive promotion of policies for the disabled by the government of Japan. Since its beginnings, JES has been developing various activities to help ensure the advancement of people with epilepsy. In 2001, with the power of the more than 6,800 JES members, the revision of the Road Traffic Act was achieved.

Conclusions

The legal stipulations on automobile driving by epilepsy patients as "absolute causes for disqualification" in the Road Traffic Act of 1960 were simply based on the disease name. At the time, epilepsy was applied to a broad range of similar disease conditions. This created "relative causes for disqualification" in not only the Road Traffic Act of 1960 but also in the Revised Road Traffic Act of 2001. The previously described organizational efforts and forces directly led to the revisions of the stipulations in the Road Traffic Act in 2001. For example, the Japanese Cabinet Office is credited with promoting eventual societal shifts that enabled changes to the Road Traffic Act when it responded to the United Nation's initiative to name the year 1981 as the International Year of Disabled Persons.

After further revisions of the Road Traffic Act in 2002, legal action related to automobile accidents caused by people with epilepsy continued to be a source of contention, but no new stipulations were added. Further revisions made in June 2013 added penalties in cases where people who violated driving laws made false statements at the time of their license acquisition or renewal. In May 2014, the Act on Penalty of Activities Causing a Person to Be Dead or Get Injured by Automobile Driving was passed as a newly established law. Due to these 2014 revisions, stricter legal penalties were imposed on epilepsy patients who neglect taking their medicines and drive recklessly with an awareness of danger.

Roads are supposed to be safe places as public social environments. Because so many people use roads daily, the importance of fair and balanced driving laws is of widespread interest for discussion as these laws evolve over time and with better knowledge of medical conditions such as epilepsy and similar diseases.

For the purpose of writing this paper, we referred to the contents of the Internet site described by the following Japanese.

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Conflict of Interest

The Authors declare that they have no conflict of interests.

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