

**Sigma's 30th International Nursing Research Congress**  
**Who Administers Insulin Injections to Elderly People With Diabetes Living at Home?**  
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**Introduction**

Japan's population is aging at a rate faster than that in other parts of the world. Diabetic patients are also becoming elderly, and this is associated with an increasing number of patients with reduced capability for self-management. A significant portion of diabetes treatment is reliant on self-management, which can cause various issues. Self-injection at home by insulin-dependent elderly patients is particularly problematic. To date, this problem has been dealt with in Japan by family members giving insulin injections in lieu of the patient with reduced capability for self-management. However, as the low-childbirth rate progresses along with the aging population, it is becoming increasingly difficult to find family members who are able to assist the patient with their insulin injections or administer the insulin injections.

**Method**

We conduct a questionnaire survey of personnel responsible for home care of elderly diabetes patients.

1. By law, who is allowed to provide diabetes care tasks, such as checking blood glucose levels and insulin administration in Japan?
2. Who administers insulin injections to elderly diabetes patients living at home?
3. May diabetes care tasks at home be performed by non-medical or non-nursing personnel?

**Result**

**The knowledge of the relevant laws about insulin injections and checking blood glucose levels in Japan**

In Japan, doctors, nurses and patients' family members are permitted to engage in insulin injections and checking blood glucose levels. Non-medical personnel can not administer insulin injections and checking blood glucose levels. Eighty-four percent of registered nurses, 57% of pharmacists, 100% of certified care workers, 100% of certified social workers, 53% of registered dietitian and 83% of medical representative in a pharmaceutical company (an insulin manufacturer), got the correct answer for questions about the legality of insulin injections in home. Sixty-five percent of registered nurses, 43% of pharmacists, 67% of certified care workers, 100% of certified social workers, 59% of registered dietitian and 67% of medical representative in a pharmaceutical company, got the correct answer for questions about the legality of checking blood glucose levels in home.

**Discussion**

In Japan, insulin injections may only be administered by doctors or nurses, in accordance with laws relating to medical qualifications, such as the Medical Practitioners' Act. Insulin injections administered at home by family members is not regarded as illegal as per the provisions of Ministry of Health and Welfare notifications, based on consideration for justification of the practice, provided that the administration satisfies the following conditions: (1) Justifiable purpose, (2) Reasonableness of the means, (3) Measured benefit and compliance with the law, (4) Relatively minor infringement of interests protected by the law, and (5) Necessity and urgency. However, pharmacists and healthcare workers are not permitted to administer insulin

injections to patients. We are currently investigating methods for assisting patients wherein healthcare workers are able to administer insulin injections within the scope of the current law, and we are holding workshops on this matter. However, with the rapid rate of aging, we need an urgent and systematic approach, specifically, providing training to occupations previously not permitted to administer insulin injections in training institutions or providing training to people who are already qualified and granting these people the permission to administer insulin injections. There is also a need to strengthen the multidisciplinary cooperation of people involved in administering insulin injections at home. There are measures that incorporate medical technology innovation. This is an issue that must be tackled proactively, while taking safety, cost-effectiveness, and access into full consideration. However, regrettably, progress is not yet seen in Japan. This problem is not unique to Japan; rather, it is an important problem common to all countries facing an aging society. The approaches may differ due to differences in the medical systems of various countries, but insulin injection is an important issue that must be considered in advance.

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**Title:**

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**Keywords:**

Diabetes, Insulin and Self-administration

**References:**

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**Abstract Summary:**

Insulin administration at home by elderly diabetes patients with reduced capability for self-management is problematic in Japan. There is a need to strengthen the interprofessional collaboration of people involved in administering insulin. This problem may be an important problem common to all countries facing an aging society.

**Content Outline:****I. Introduction**

Japan's population is aging at a rate faster than that in other parts of the world. Diabetic patients are also becoming elderly, and this is associated with an increasing number of patients with reduced capability for self-management. Insulin administration at home by

elderly diabetes patients with reduced capability for self-management is problematic in Japan.

## **II. Method**

We conduct a questionnaire survey of personnel responsible for home care of elderly diabetes patients.

## **III. Results**

1. By law , who is allowed to provide diabetes care tasks, such as checking blood glucose levels and insulin administration in Japan?
2. Who administers insulin injections to elderly diabetes patients 1iving at home?
3. May diabetes care tasks at home be performed by non-medical or non-nursing personnel?

## **IV. Disccution**

With the rapid rate of aging, we need an urgent and systematic approach, specifically, providing training to occupations previously not permitted to administer insulin injections. There is a need to strengthen the interprofessional collaboration of people involved in administering insulin. This problem may be an important problem common to all countries facing an aging society

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