

Importance of Collaboration With Multiple Areas in Providing Medical and Welfare Supports

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Background

After disasters, ongoing medical and welfare support for residents living in the disaster environment is required, as well as emergency medical care for injured residents.

It is important to consider not only continued support for residents receiving medical and welfare support, but also support responses for residents whose health condition deteriorates after disaster in advance.

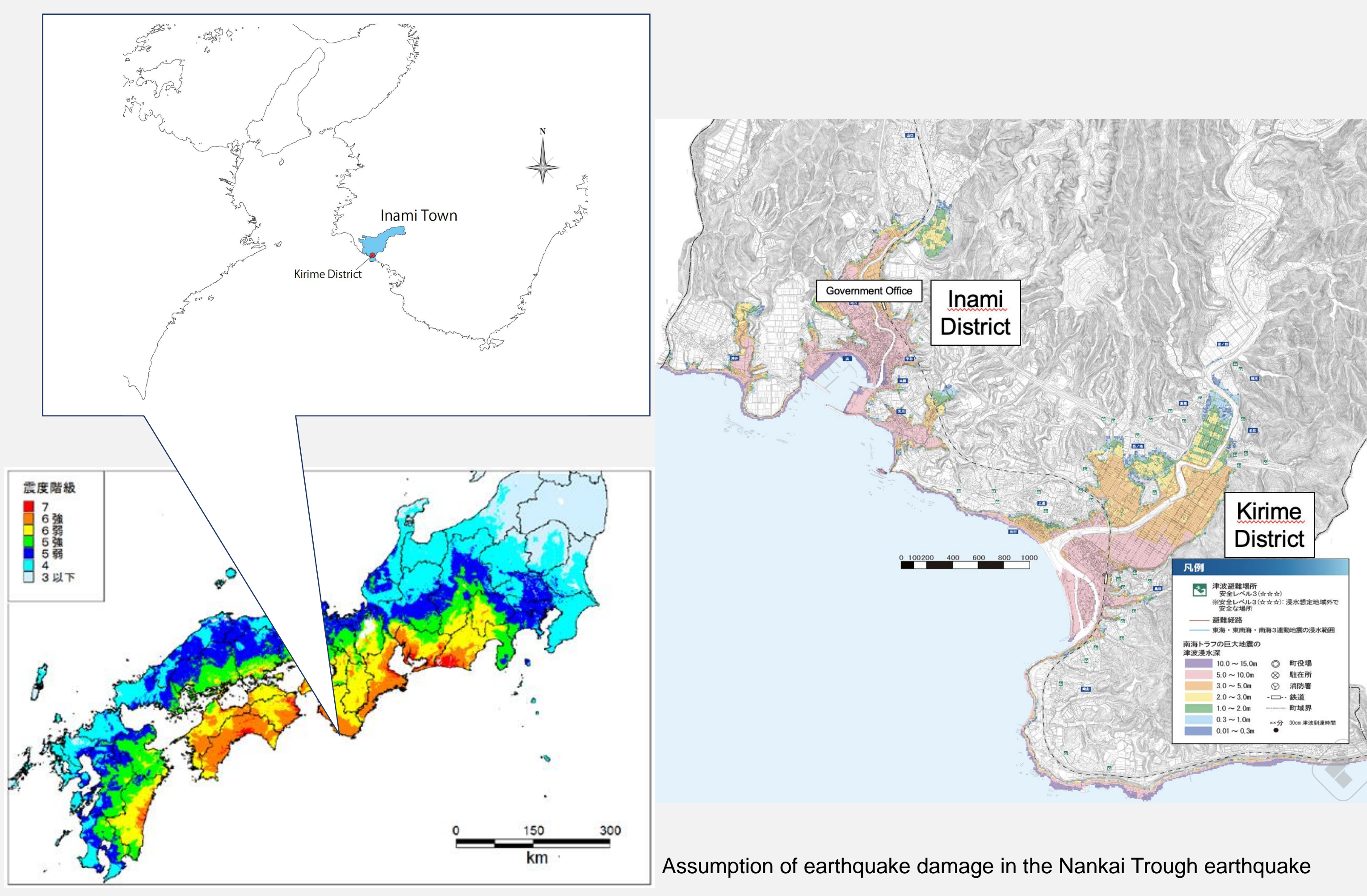
Purpose

To structurally understand the relationship between residents' attributes, the anxiety and intent to access medical care and welfare service after disaster.

※Respondent attributes: age, gender, elderly person(s), person(s) requiring special care, hospital visit, regular medication, and welfare care service

Survey Area

Kirime, Inami town, Wakayama, Japan



Method

We conducted a survey for residents' of Kirime district between September 12 and October 17, 2022. We distributed two questionnaires to each of the 640 households in Kirime district and received 723 valid responses. We used path analysis to analyze the data.

Result

Question: The earthquake and tsunami would cause Kirime to lose electricity and water service. How worried would you be if you had to continue living in Kirime for about 10 days because of the loss of electricity and water supply and the destruction of roads due to the quake and tsunami?

Items about the anxiety

	average	Standard deviation
a_1 You might deteriorate physical condition	4.02	0.98
a_2 You will not be able to receive medical care or welfare support	3.82	1.02
a_3 Not receiving support from government agencies for your district	4.00	0.99
a_4 Your poor health might cause inconvenience	3.89	0.96
a_5 You could not get the regular medications	3.98	1.15
a_6 Your health is compromised by the infection	4.37	0.83
a_7 Physical or behavioral difficulties due to inability to use equipment at home	3.45	1.09

Items about intent of continuing support

	average	Standard deviation
b_1 If the roads are disrupted, you should be able to reach the hospital, even if you have to secure a helicopter or other special means of transportation	4.12	0.94
b_2 Even in the midst of the disaster, you should be able to talk to someone with health-related expertise	4.10	0.78
b_3 If you run out of a medicine you use on a daily basis, you want to procure it immediately	4.44	0.75
b_4 You want access to welfare support	4.02	0.78

Acknowledgement

We would like to thank the Inami Town Office for conducting the survey of residents in the Kirime area of Inami Town and all the residents who cooperated in distributing and filling out the survey forms.

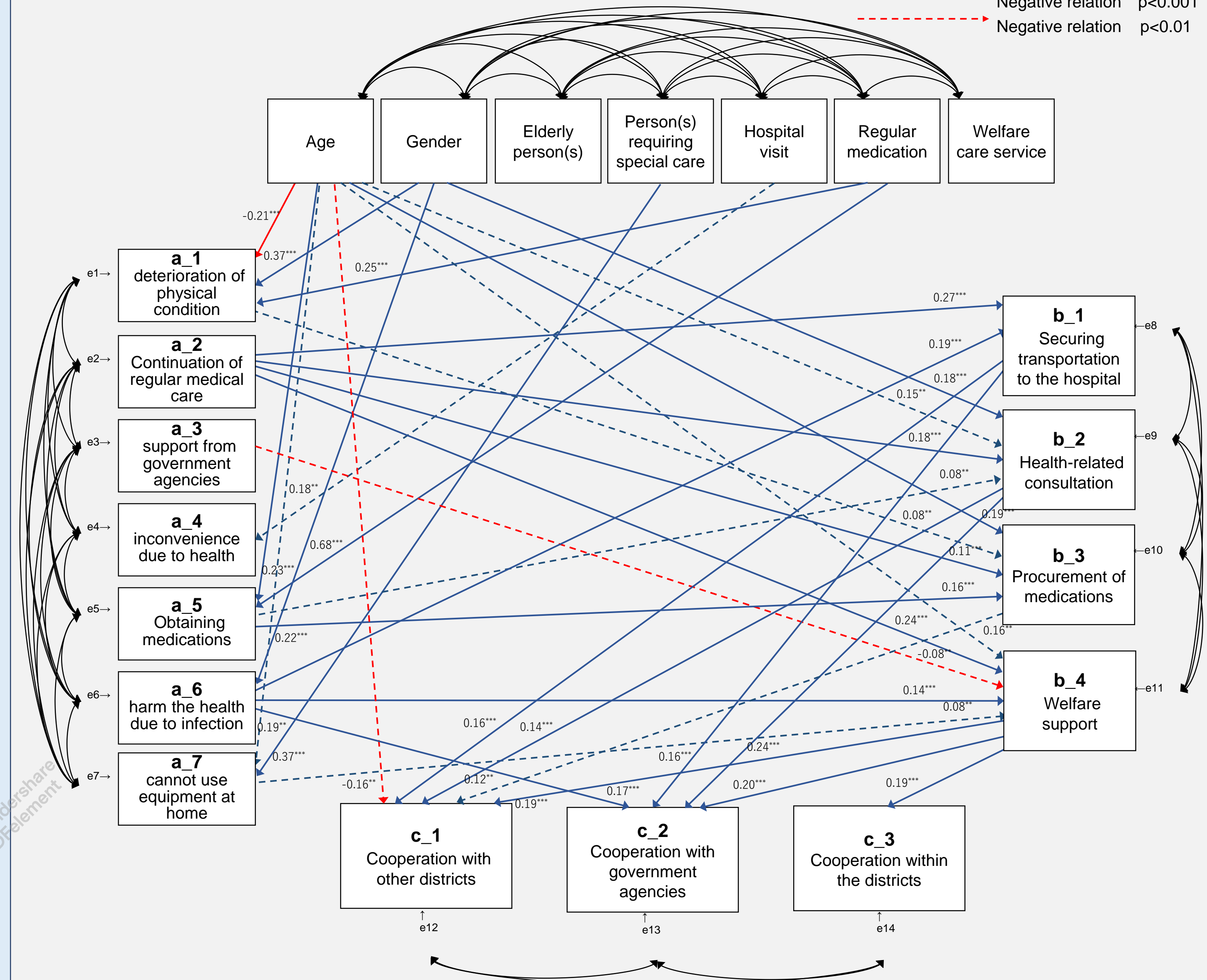
Items about intent of collaboration

	average	Standard deviation
c_1 It is important to work with other districts	4.17	0.83
c_2 We would like to see close cooperation with government agencies involved in disaster response	4.30	0.76
c_3 We would like to build a system in which district residents can work together to provide support for those in need	4.24	0.69

Dummy

Age	0=under 60, 1=over 60	Hospital visit	0=No, 1=Yes
Gender	0=male, 1=female	Regular medication	0=No, 1=Yes
Elderly person(s)	0=No, 1=Yes	Welfare care service	0=No, 1=Yes
Person(s) requiring special care	0=No, 1=Yes		

— Positive relation p<0.001
- - - Positive relation p<0.01
- - - Negative relation p<0.001
- - - Negative relation p<0.01



Results of analysis by path analysis

Neither [Elderly person(s)] nor [Hospital Visit] was determinant of the perception of feeling of anxiety or intention of measures. However, in the Great East Japan Earthquake, about 90% of disaster-related deaths were among the elderly

Previous disasters have presented challenges in providing ongoing support for those in need of disaster relief and nursing care services, and there is a need to examine the challenges of providing care for the elderly and those in need of disaster relief.

[age], a_1 "deterioration of physical condition", a_2 "Continuation of regular medical care", a_5 "Obtaining medications" were determinants of b_3 "Procurement of medications"

In addition to procuring chronically taken medicines, medicines are required as needed in response to changes in physical condition after a disaster.

There is a negative relationship between b_4 "Welfare support" and a_3 "support from government agencies"
→ Tend to consider it difficult to receive welfare support without assistance from the government agencies

It is important to consider building a system that can provide welfare support within the community in addition to public support from government agencies

All of the intent of continuing support was determinant of item c_1 "Collaboration with other districts"

People believe that collaboration among districts is necessary to continue of medical, health, and welfare support

Conclusion

In addition to developing a plan to ensure that residents who continue to live in the affected environment do not become physically ill, it is also necessary to envision how to deal with **residents whose physical condition deteriorates**.

The plan for **cooperation between districts** should be considered and drills should be conducted.

References

- 1) Inami Town Disaster Prevention Council, Inami Town Regional Disaster Prevention Plan, 2019
- 2) Japan Meteorological Agency, Damage assumption of Nankai Trough megathrust earthquake, 2013
- 3) Reconstruction Agency, In the Great East Japan Earthquake reports of earthquake-related deaths, 2012