

Field report

Risk factor for difficult cases at the comprehensive consultation services about medical, welfare and legal problems

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Abstract

It is very important to cooperate with interprofessional personnel in order to establish the community-based integrated care system, but this is very difficult. We have held comprehensive consultation services regarding medical, welfare, and legal problems to support the community.

Objectives: This study aimed to identify the associations between background factors (such as medical conditions, intractable diseases, welfare problems, disabilities, economic difficulties, legal problems, elderly adults, children, and foreign persons) and difficult cases to provide more thorough consultation services.

Patients and Methods: A survey was conducted on people who participated in comprehensive consultation services on medical, welfare, and legal issues related to medical care, welfare, and legal matters held from April 2021 to March 2024. We analyzed risk factors that may be difficult to resolve using multivariate logistic regression.

Results: Multivariate analysis showed that the factor of “economic difficulty” was significantly more difficult to solve.

Conclusion: When treating patients, doctors must consider the possibility of multiple underlying issues. It is advisable for doctors to be aware of the need to consult with social workers and legal professionals when necessary.

Key words: community-based integrated care, comprehensive consultation service, interprofessional collaboration, multi-layered support system, social determinants of health

(J Rural Med 2025; 20(1): 53–57)

Introduction

Cooperation with interprofessional personnel is crucial to establishing a community-based integrated care system and a regional cohesive society, however, this is very dif-

ficult^{1, 2)}. People who face difficulties in life have various combined welfare issues within the community; therefore, it would be preferable to provide multi-layered support. We held comprehensive consultation services regarding medical, welfare, and legal issues to support the community. This study aimed to identify associations between background factors and difficult cases in order to provide more thorough consultation services.

Patients and Methods

Study design and participants

This retrospective observational study was conducted exclusively at the comprehensive consultation services for medical, welfare, and legal issues from April 2021 to March

Received: August 9, 2024

Accepted: October 16, 2024

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2024. The eligible participants for this study included 411 participants who consulted us regarding their problems. Notably, 24 participants whom we could not get in touch with, were excluded from the study.

Data collection

The following data were collected from the Shizuoka City Shimizu Medical Association database: sex, medical conditions (excluding intractable disease), intractable diseases, welfare problems (excluding disability and economic difficulty), disability, economic difficulty, legal issues, elderly adults (aged 65 and above), children (below 15 years of age), and foreign individuals. Data collection began in April 2021 and ended in March 2024.

Definitions of “Unsolved”

In this study, cases that remained unresolved one month after the consultation were defined as “Unsolved”.

Statistical analysis

We analyzed risk factors for “Unsolved” cases using multivariate logistic regression. To assess multicollinearity among the categories used in the multivariate analysis, we determined that there was no problem when the Variance Inflation Factor (VIF) was less than 3. All statistical analyses were performed using R statistical software (version 4.4.0; R Foundation, Vienna, Austria, <http://www.r-project.org/>).

Results

Comprehensive consultation services were conducted 18 times from April 2021 to March 2024, with a total of 1,451 supporters participating. The average number of supporters per session was 17.2 for medical, 46.8 for welfare, 8.7 for legal matters, and 7.9 for other areas (Table 1). Among the 387 participants who sought advice, ages ranged from 5 to 99 years with an average age of 56.1 years. The background factors of people seeking help were categorized into gender (187 males and 200 females), medical conditions (excluding intractable disease: 152 cases, 39.3%), intractable disease (15 cases, 3.9%), welfare problems (excluding disability and economic difficulty: 235 cases, 60.7%), disability (211 cases, 54.5%), economic difficulty (109 cases, 28.2%), legal issues (238 cases, 61.5%), elderly adult (aged 65 and above: 142 cases, 36.7%), children (below 15 years of age: 16 cases, 4.1%), and foreign individuals (13 cases, 3.4%) (multiple choice). Welfare problems (excluding disability and economic difficulty), disability, and legal issues accounted for a large proportion of the problems (Table 2).

Cases that remain unresolved one month after the consultation are defined as difficult-to-resolve cases (“Unsolved”). Consequently, 159 cases were difficult to resolve, accounting for 41.1% of the total cases. Among the cases that were

Table 1 The classification of the supporters

Medical professional	
Physicians	122
Dentists	35
Pharmacists	34
Public health nurses	58
Nurses	27
Dental hygienists	12
Physical therapists	21
Occupational therapists	1
Welfare professional	
Certified social workers	467
Psychiatric social workers	155
Disability support specialists	54
Social welfare officers	166
Legal professional	
Lawyers	151
Judicial scriveners	6
Others	142

Table 2 Backgrounds of the 387 participants

Age (Range/Average)	5–99 years old/56.1 years old
Sex (Male/Female)	187/200
Medical	152 (39.3%)
Intractable disease	15 (3.9%)
Welfare	235 (60.7%)
Disability	211 (54.5%)
Economic difficulty	109 (28.2%)
Legal	238 (61.5%)
Elderly	142 (36.7%)
Children	16 (4.1%)
Foreign	13 (3.4%)

*Multiple choice.

resolved within one month, legal factors were the most common, accounting for 142 cases (62.2%). In contrast, welfare factors were the most common in difficult-to-solve cases, accounting for 106 cases (66.7%) (Table 3).

Regarding the multicollinearity of the categories used in the multivariate analysis, it was determined that there was no problem since the VIF was less than 3 for all items. The multivariate analysis revealed that the factor of “economic difficulty” was significantly more difficult to solve (odds ratio 1.893, 95% confidence interval 1.159–3.110, $P=0.011$), as indicated in Figure 1.

Discussion

According to the World Health Organization (WHO), in-

Table 3 The characteristic of the social backgrounds of participants in detail

Factor	Solved* (n=228)	Unsolved** (n=159)
Medical	85 (37.3%)	67 (42.1%)
Intractable disease	11 (4.8%)	4 (2.5%)
Welfare	129 (56.6%)	106 (66.7%)
Disability	116 (50.9%)	95 (59.7%)
Economic difficulty	51 (22.4%)	58 (36.5%)
Legal	142 (62.2%)	96 (60.4%)
Elderly	90 (39.5%)	52 (32.7%)
Children	12 (5.3%)	4 (2.5%)
Foreign	8 (3.5%)	5 (3.1%)

*Solved means that case was resolved within one month after the consultation.

**Unsolved means that case remained unresolved one month after the consultation.

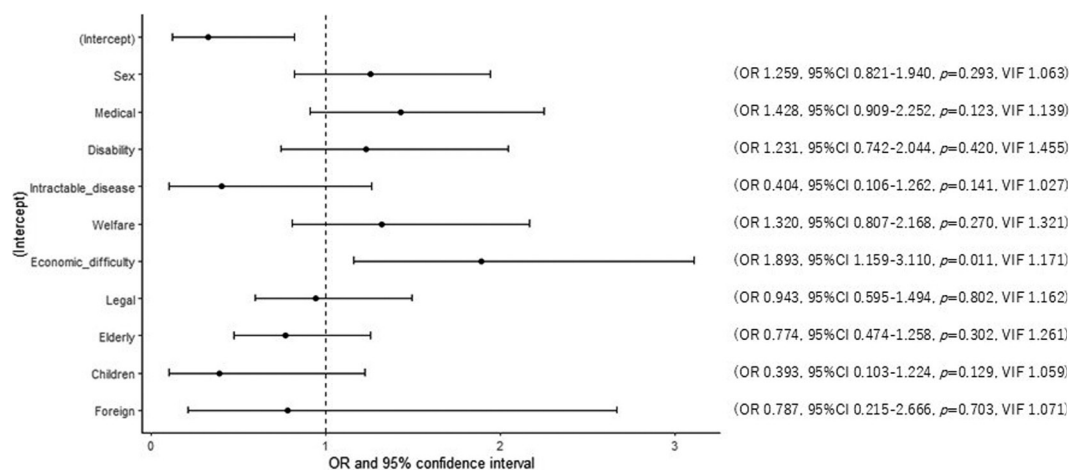


Figure 1 Risk factors for unresolved complications were assessed using logistic regression analysis. Unsolved means that the case remained unresolved one month after the consultation. OR: odds ratio; 95% CI: 95% confidence interval; VIF: variance inflation factor.

tegrated care is defined as a concept that brings together the input, delivery, management, and organization of services related to diagnosis, treatment, care, rehabilitation, and health promotion³). The WHO also explains that integration is a means of improving access, quality, customer satisfaction, and efficiency of services³). However, many local governments lack experience in integrating medical care, nursing care, and welfare services. This situation is not limited to Japan, developed countries also face similar issues^{2, 4-6}).

Given this background, we established a new project for comprehensive consultation services addressing medical, welfare, and legal issues to support the community. A total of 736 consultations were conducted between September 2016 and March 2024. Starting in April 2021, participants were asked whether their issues had been resolved after one month. Therefore, the target period for this study was from April 2021 to March 2024. Medical, welfare, and legal personnel participated in the comprehensive services (Table 1).

First, certified or psychiatric social workers, acting as

supporters, assessed the situation. Next, the supporters consulted with professional personnel about the problems and organized the content, which led to the problem resolution (Figure 2).

We provided multilayered support for various combined welfare issues faced by individuals in life through inter-professional collaboration. These supportive solutions are known as social prescriptions, as proposed by the Healthy London Partnership⁷).

Comprehensive consultations with medical, welfare, or legal professionals are rare in Japan. To the best of our knowledge, no similar studies have been reported to date. As a result of examining the content of consultations, the factor of “economic difficulties” was significantly more difficult to solve (Figure 1). The topic of consultation regarding “welfare problems” accounted for a large proportion of both “Solved” and “Unsolved” cases (56.6% and 66.7%, respectively) (Table 3). Although there was a tendency for problems to be more difficult to solve, this difference was



Figure 2 a: The brochure of comprehensive consultation service, b: Hearing and assessment by certified social workers or psychiatric social workers, c: Professionals on standby in the waiting room, d: Consultation by medical, welfare and legal professionals.

not statistically significant (Figure 1). A deeper exploration of “welfare problems” reveals a diverse and highly individualized nature, suggesting that many issues can be both easy and difficult to resolve. Additionally, “legal issues” accounted for a large proportion of consultations in both cases (62.2% resolved and 60.4% unresolved) (Table 3). Although it is relatively clear which “legal issues” can and cannot be resolved legally, other factors also coexist with these legal issues; therefore, it is inferred that there may not have been a statistically significant difference in their overall impact on problem resolution.

Financial hardship and social isolation are intricately intertwined with various social factors that affect health risks^{8, 9}. Individuals facing financial disadvantages often suffer from multiple health problems and social challenges, making these issues complex and chaotic¹⁰.

However, financial support alone is not sufficient to ensure the health of poor people who live alone and have backgrounds related to social isolation¹¹. Understanding users’ needs is important based on their social backgrounds, collaborating with various support organizations within the community, and providing multifaceted support¹¹.

In recent years, the importance of medical professionals grasping and understanding patients’ social determinants of health and responding appropriately has been empha-

sized^{12, 13}. Considering that a decline in social connections is directly linked to social isolation¹⁴, seeming worthwhile to provide regular comprehensive consultation services.

A limitation of this study was the failure to use objective indicators of economic hardship. Since poverty was not objectively defined, further studies are needed to determine the degree of deprivation that affects outcomes.

Conclusion

We planned and held comprehensive consultation services on medical, welfare, and legal issues to support the community. When treating patients, physicians must be aware of multiple underlying issues. In particular, in cases where “economic difficulty” is a factor, the need to be aware of consultation with social workers or legal professionals is advisable, because of a high risk that the problem may be difficult to solve.

Conflict of interest: The authors declare no conflicts of interest.

Funding information: This research received two grants from France Bed Medical Home Care Research Subsidy Public Interest Incorporated Foundations and the Yuu-

mi Memorial Foundation for Home Health Care.

Ethics approval: Ethical considerations were rigorously adhered to in accordance with the principles of the Declaration of Helsinki, and ethical approval was obtained from the Ethics Committee of Shimizu Welfare Hospital (Approval No. 6-1).

Consent for publication: All authors approved the final manuscript before submission.

Data availability statement: Data are available from the corresponding author on request.

Author contributions: Concept and design: MN, CA, MM, HS, NK and MM. Acquisition, analysis, and interpretation of data: MN, CA, OT, HS, and NK. Manuscript drafting: MN. Critical revision of the manuscript for important intellectual content: MN, CA, MM, OT, NK, and MM. Statistical analysis: MN.

Acknowledgements

We thank the Shizuoka City Shimizu Medical Association and the medical, welfare, legal, and other professionals who greatly supported us in providing comprehensive consultation services.

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