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Online Survey Research on Healthcare Professionals' Experiences and Responses to Complementary and Alternative Medicine in Cancer Treatment : HERO-CAM

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Introduction

The Internet has made it easier for cancer patients to access information about standard treatments and guidelines. However, they are also more exposed to unverified information about complementary and alternative medicine (CAM). Consequently, healthcare providers often receive questions about CAM and are asked for their opinions on its use.
Although a previous study[1)] examined the perceptions and attitudes of Japanese clinical oncologists toward CAM in cancer treatment, it only included physicians. This study includes a broader range of healthcare professionals to offer a more comprehensive understanding of attitudes towards CAM.

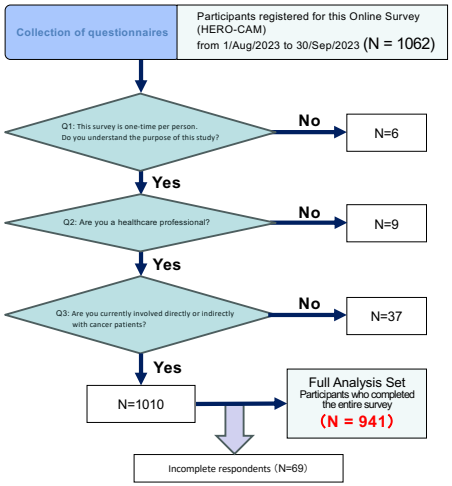
Aim

The purpose of this study was to determine the extent to which healthcare professionals have received inquiries about CAM, the content of those inquiries, and how they respond to them.

Methods

The survey, consisting of 20 questions, was conducted using Momentive's SurveyMonkey® platform. We widely promoted participation through social media and with the cooperation of the Japanese Society of Cancer Supportive Care. Target respondents were healthcare professionals directly or indirectly involved with cancer patients. The survey was conducted over two months from August 1 to September 30, 2023.

Flow Diagram



Background of survey respondents

	Total (N = 941)	
Sex, N(%)		
Male	439	(46.7)
Female	502	(53.3)
Age, N(%)		
20-29 years old	95	(10.1)
30-39 years old	198	(21.0)
40-49 years old	327	(34.8)
50-59 years old	255	(27.1)
60 years and older	66	(7.0)
Years of experience, N(%)		
0-5 years	87	(9.2)
6-10 years	111	(11.8)
11-15 years	136	(14.5)
16-20 years	142	(15.1)
21 years and over	465	(49.4)

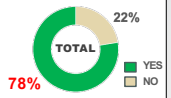
	Total (N = 941)	
Specialty, N(%)		
Physician/Dentist	349	(37.1)
Nurse	363	(38.6)
Pharmacist	158	(16.8)
Others	71	(7.5)
Physical Therapist	27	(2.9)
Occupational Therapist	7	(0.7)
Medical Technologist	3	(0.3)
Radiological Technologist	9	(1.0)
Social Worker	9	(1.0)
Registered Dietitian	4	(0.4)
Medical Clerk	5	(0.5)
Clinical Research Coordinator	3	(0.3)
Clinical Psychologist	1	(0.1)
Dental Hygienist	1	(0.1)
Midwife	1	(0.1)
Acupuncturist	1	(0.1)

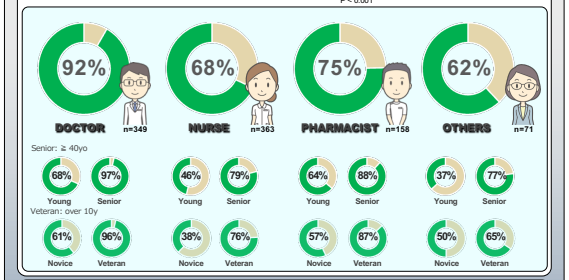
Primary Outcome : Experience with Consultations on CAM

Q7: Have you ever been consulted about CAM?

	N	Doctor	Nurse	Pharmacist	Others
With CAM consult	730 (78%)	320 (92%)	247 (68%)	119 (75%)	44 (62%)
Without CAM consult	211 (22%)	29 (8%)	116 (32%)	39 (25%)	27 (38%)

P < 0.001





Statistical Analysis

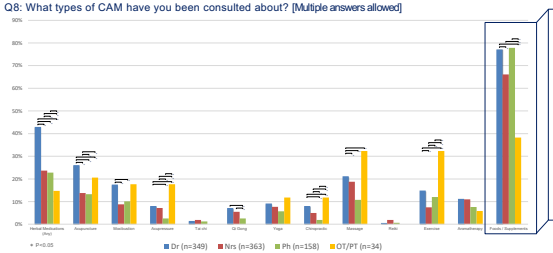
- ✓ To examine the association between different healthcare professions and their responses to each survey question, we used the chi-square test of independence. This test helped us determine whether there were statistically significant differences in the responses among the groups.
- ✓ Pairwise comparisons were conducted for each survey question to identify specific pairs of professions that showed significant differences. The significance level was set at $p < 0.05$.

Other Questionnaire Items

Q4: What is your age group?
Q5: What is your gender?
Q6: How many years have you been in your current profession?
Q9: How knowledgeable do you think you are about CAM?
Q10: Have you ever received education about 'Kampo medicine'?
Q11: Have you ever received education about CAM, health foods, or supplements (excluding Kampo medicine)?
Q13: What sources do you use to obtain information about CAM?
Q15: Please select the reasons why you think CAM should not be permitted or used.
Q16: Please select the reasons why you think CAM should be permitted or used.
Q17: How do you respond when you receive such consultations?
Q18: How did you feel when you received such consultations?
Q19: Do you think receiving such consultations affects subsequent treatment plans?
Q20: Please share your thoughts on CAM

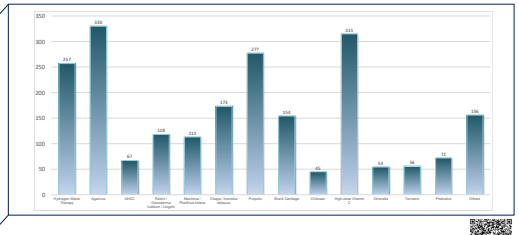
Secondary Outcomes:

Q8: What types of CAM have you been consulted about? [Multiple answers allowed]



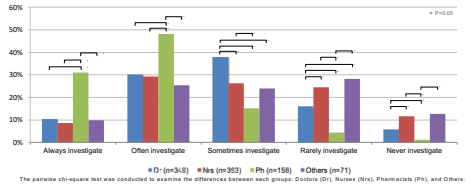
A chi-square test was conducted to examine the differences in investigation frequency among different professional groups: Doctors (Dr), Nurses (Nrs), Pharmacists (Ph), and OT (Occupational Therapist) / PT (Physical Therapist).

What kinds of foods or supplements have you ever been consulted about? [Multiple answers allowed]



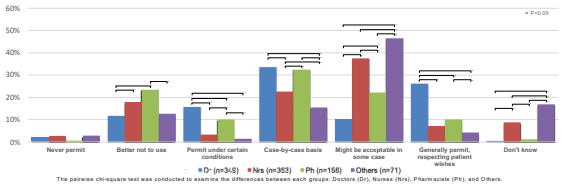
For detailed explanations about various CAM, foods, and supplements, please refer to the link provided in this QR code.

Q12: How often do you research CAM? [Please select one]



The pairwise chi-square test was conducted to examine the differences between each groups: Doctors (Dr), Nurses (Nrs), Pharmacists (Ph), and Others.

Q14: What is your basic stance when patients express a desire to use CAM? [Please select one]



The pairwise chi-square test was conducted to examine the differences between each groups: Doctors (Dr), Nurses (Nrs), Pharmacists (Ph), and Others.

Summary of Findings

✓**Ph (Pharmacists)** showed significant differences from other groups (Dr, Nrs, Others) in most questions. Specifically, Ph had the highest percentages in "Always investigate" and "Often investigate".

✓**Dr (Doctors)** and **Nrs (Nurses)** showed significant differences in multiple questions, particularly in "Rarely investigate" and "Never investigate".

✓The **Others** group showed significant differences from groups other than Ph in some questions.

These results indicate differences in the frequency of investigations and the perceived importance of investigations among different professions. Pharmacists tend to conduct investigations more frequently compared to other professions. In contrast, Doctors and Nurses are less proactive in conducting investigations compared to Pharmacists.

Summary of Findings

1.**Never Permit**:
While most groups have a low percentage, Ph (0.6%) are particularly less likely to never permit compared to others.

2.**Better Not to Use**:
The proportion of Ph (23.4%) who believe it is better not to use the item is significantly higher compared to Dr (11.7%), Nrs (17.9%), and Others (12.7%).

3.**Permit Under Certain Conditions**:
Dr (15.8%) are more likely to permit under certain conditions compared to Nrs (3.3%) and Others (1.4%).

4.**Case-by-case Basis**:
A substantial proportion of Dr (33.5%) and Ph (32.3%) prefer a case-by-case approach, whereas a smaller percentage of Nrs (22.6%) and Others (15.5%) do.

5.**Might be Acceptable in Some Cases**:
Nrs (37.5%) and Others (46.5%) are more inclined to think it might be acceptable in some cases, compared to Dr (10.3%) and Ph (22.2%).

6.**Generally Permit, Respecting Patient Wishes**:
A higher percentage of Dr (26.1%) generally permit the use of the item respecting patient wishes compared to Nrs (7.2%), Ph (10.1%), and Others (4.2%).

7.**Don't Know**:
A significant proportion of Nrs (8.8%) and Others (16.9%) responded with "Don't know," which is higher compared to Dr (0.6%) and Ph (1.3%).

Discussion

Issues

1.**Lack of Evidence**
- ✓ Limited scientific evidence on CAM's effectiveness and safety.
- ✓ Patients are interested in CAM, but reliable information is scarce.

2.**Insufficient Knowledge Among Healthcare Professionals**
- ✓ Many healthcare professionals lack adequate knowledge of CAM.
- ✓ CAM is not sufficiently covered in medical education and training.

3.**Lack of Time for Discussion**
- ✓ Busy schedules leave little time for healthcare professionals to discuss CAM with patients.
- ✓ Patients may rely on unreliable sources for CAM information.

Solutions

1.**Strengthen Evidence**
- ✓ Promote clinical research on CAM to build a robust evidence base.
- ✓ Increase funding for CAM research from government and institutions.

2.**Enhance Education and Training**
- ✓ Integrate CAM topics into medical education curricula.
- ✓ Provide continuing education programs on CAM for current healthcare professionals.

3.**Improve Patient Communication**
- ✓ Streamline clinical workflows to allow more time for CAM discussions.
- ✓ Offer reliable CAM information through pamphlets and online resources.

4.**Multidisciplinary Team Approach**
- ✓ Foster collaboration among doctors, nurses, pharmacists, OTs, PTs, and other healthcare professionals for CAM care.
- ✓ Share CAM information within the team to provide comprehensive patient care.

Conclusion

This study reveals significant differences in attitudes towards CAM among healthcare professionals, with pharmacists being more proactive in investigations.
To improve patient care, it is essential to enhance education, strengthen evidence, and foster better communication about CAM across all healthcare professions.

1) Hyodo I, et al. Perceptions and attitudes of clinical oncologists on complementary and alternative medicine: a nationwide survey in Japan. Cancer. 2003 Jun 1;97(11):2861-8. doi: 10.1002/cncr.11402. PMID: 12767101.