

Report**Workshops for Enhancing the Collaboration Skills and Self-efficacy of Japanese Administrative Dietitians**

Tatsuya Koyama^{1*}, Maya Akahori², Yusuke Arai³, Ayaka Iida⁴, Sumie Isobe⁵, Rie Okamoto⁶, Osamu Kushida⁷, Izumi Shibuya⁸, Kazumi Tanaka⁴, Ayumi Morooka⁹, Katsushi Yoshita¹⁰

¹ Mimasaka University

² Shizuoka Prefecture Government

³ Chiba Prefectural University of Health Science

⁴ Kanagawa University of Human Services

⁵ Niigata Prefecture Government

⁶ Kanazawa University

⁷ University of Shizuoka

⁸ Aichi Prefectural Government

⁹ Hyogo Prefectural Government

¹⁰ Osaka Metropolitan University

ABSTRACT *Background and purpose.* We conducted workshops to enhance the collaboration skills and self-efficacy of administrative dietitians working in local governments. This study presents the results of a post-workshop questionnaire administered to the workshop participants, which evaluated the workshop program. *Methods.* Participants of the workshops were asked to answer a reflection sheet about their career. The workshops consisted of lectures and exercises, and participants were asked to respond to questionnaires at the end of the workshop. Free-text descriptions were analyzed using reflexive thematic analysis. *Results.* A total of 61 and 43 administrative dietitians participated in the workshops held in prefectures A and B and prefectures B and C, respectively. Participants in all the workshops expressed their willingness to collaborate with multiple divisions and improve the preconditions for self-efficacy. Participants found satisfaction in reflecting on their work by interacting with other administrative dietitians. *Conclusion.* Workshops similar to ours should be held throughout Japan to promote a nutrition policy that accounts for everyone and achieves sustainable societies.

Keywords: collaboration, self-efficacy, workshop, administrative dietitian, Japan

INTRODUCTION

In Japan, health promotion efforts involve a variety of specialized professionals, including registered dietitians. National and local governments are required to develop these human resources (1). Administrative dietitians in Japan provide nutritional guidance for residents of local governments and work in prefectural offices, public health centers, and municipal health centers. The duties of administrative dietitians vary depending on the organization they work for, but can be organized into the following five categories: 1) developing organizational structures, 2) clarifying health and nutrition issues and promoting measures based on the management cycle, 3) promoting measures to prevent the onset and severity of non-commutable diseases, 4) promoting measures to maintain and improve functions necessary for independent social life, and 5) promoting a social environment through food and nutrition (2). Although the work of administrative dietitians varies greatly, the

number of administrative dietitians working in a single institution is small. For example, on average, 2.0 dietitians work at a health center established by a prefecture, and 1.1 dietitians work at a municipal health center (3). Therefore, administrative dietitians need to collaborate with a wide variety of stakeholders to maximize the results of adopted measures.

The perception of one's potential to perform a behavior is called self-efficacy; the stronger one's self-efficacy, the more likely one is to perform that behavior. In addition to the four sources of information, Bandura identified the following antecedents of self-efficacy (4) - enactive mastery experience, vicarious experience, verbal persuasion, and physiological-emotional state - the following have been identified: meaningfulness or need for behavior (5, 6), behavioral strategies (7), causal attributions (8), social support (9), and health status (10). Self-efficacy has been shown to increase the probability of achieving a behavior (11), of challenging the targeted behavior, and of achieving the behavior in similar situations (12) and reduce anxiety and fear (13). However, Japanese administrative dietitians working at municipal health

*To whom correspondence should be addressed:

koyama-ta@mimasaka.ac.jp

centers tend to have low self-efficacy (14). Most Japanese administrative dietitians consistently lack confidence in their work, do not know who to talk to about work and resolving problems, and face uncertainty about their future (14). The competencies and skills necessary for administrative dietitians to perform their work have been indicated (15). Increasing the self-efficacy of administrative dietitians may be crucial for acquiring and utilizing these competencies and skills.

In Japan, workshops for administrative dietitians have been conducted by the national and local governments, professional associations such as the Japan Dietetic Association and the Japanese Association of Public Health Center Registered Dietitians, and research institutions such as the National Institute of Public Health. Administrative dietitians working in municipal health centers reported that they did not have a high sense of self-efficacy in carrying out their work. However, few workshops have been conducted with the aim of improving collaboration with diverse stakeholders and enhancing self-efficacy.

Our study examined the current conditions of Japanese administrative dietitians and reviewed existing human resource development for them. Based on our research, we designed a plan for developing human resources for Japanese administrative dietitians. Therefore, we conducted workshops to enhance the collaboration skills and self-efficacy of administrative dietitians working in local governments. This study presents the results of a post-workshop questionnaire administered to workshop participants, which evaluated the workshop program.

MATERIALS AND METHODS

1. Workshops aimed at enhancing collaboration skills

Workshops aimed at enhancing the skills to collaborate with diverse stakeholders were held in Prefecture A in September 2022 and Prefecture B in November 2022, in collaboration with prefectural staff.

Participants

The prefectural staff recruited administrative dietitians from the prefecture for both workshops. A total of 24 and 37 prefectural or municipal administrative dietitians participated in the workshops conducted in Prefectures A and B, respectively.

Programs

Prior to the workshops, participants were asked to fill out a "reflection sheet (similar to a lifeline chart, a sheet used to track changes in happiness (fulfillment) from the time of employment to the present, including affiliation, position, major accomplishments, efforts and achievements focused on, competencies acquired, milestones and impressions)." Additionally, they were asked to note their "daily concerns and issues in working," and "issues and daily thoughts regarding human resource development for administrative dietitians in their organizations," and to bring these reports to the workshop.

The workshops consisted of lectures on practical examples and collaboration skills, and exercises with cases that required collaboration with diverse stakeholders. The contents of the exercises were determined by the situation in which the workshops were held and the organizations to which the workshop participants belonged. The schedule for the workshops held in Prefectures A and B is presented in Table 1.

Table 1. The timetable of the workshop for enhancing collaboration skills

Time	Contents	Lecturer
10:35~11:05	Lecture 1: Our research findings, roles of mid-career workers, and what they need to learn	University faculty
11:05~11:50	Lecture 2-1: How to build a strategy for administrative dietitians: practical "strategic devices" for mainstreaming nutrition.	Nutrition technical officer of the Ministry of Health, Labour, and Welfare
11:50~12:00	Lecture 2-2: How to build a strategy for administrative dietitians: How to proceed with policy-making, which I learned while on secondment at the Ministry of Health, Labour, and Welfare.	Nutrition technical officer of the Ministry of Health, Labour, and Welfare
13:00~13:40	Lecture 3: Organization and work practices	University faculty
13:40~14:50	Exercise 1: Issue clarification and negotiation skill	University faculty
15:00~16:00	Exercise 2: Dietitians in the organization	Administrative dietitian of the prefecture
16:00~16:25	Encouragement and Summary	All staff and participants

The workshops conducted in prefectures A and B featured identical lectures. Lecture 1 outlined the introduction to the workshop. The 30-minute lecture explained the positioning of the workshop, our research findings for the development of training programs for public health dietitians working in local

governments, the roles of mid-career administrative dietitians (more than ten years of work experience), and what administrative dietitians should acquire during and after the mid-career stage. Lecture 2 consisted of two parts. The first section presented examples of the practice of cooperation and

collaboration with various stakeholders. The lecturer explained the actual activities and their background by the nutrition technical officer of the Ministry of Health, Labour and Welfare (MHLW), including 1) how to formulate strategies, 2) the role and significance of the administrative dietitians (purpose), 3) the mainstreaming of nutrition implemented at the MHLW, by illustrating the creation of healthy and sustainable food environments with an example (16), and 3) useful ideas such as the outside-in and inside-out approach, value promotion, and mindset. The second section featured a lecture from the technical officer seconded from the prefecture to the MHLW, who talked about her experiences involving policymaking at the MHLW. We included this lecture as we believed she could be a role model for the workshop participants. Lecture 3 was a 40-minute lecture on career management, clarifying objectives, effective communication skills for mid-career staff, and how to negotiate, which served as an introduction to collaboration skills.

In the workshop held in Prefecture A, the groups were initially divided according to the organization in which they worked and further divided so that the organization they worked for was in the same neighborhood. In the workshop held in Prefecture B, the groups were divided according to the region of the organization such that administrative dietitians from the prefecture and administrative dietitians from the municipality were mixed.

Although the main theme in exercise 1 was common, the specific content was changed according to the situation of the location where the workshop was held. Exercise 1 of the workshop conducted in Prefecture A consisted of 55 minutes of group work using SWOT analysis and a 3-minute presentation by each group on the integrated implementation of health services for the elderly (a group consisting of administrative dietitians from municipalities) or the development of a disaster preparedness system for food service facilities (a group consisting of administrative dietitians from the prefecture or city with a public health center). SWOT analysis is a strategic planning and strategic management technique used to help a person or organization identify Strengths, Weaknesses, Opportunities, and Threats related to business competition or project planning.

In 2018, the basic policy on economic and fiscal management and reforms stated that the government would consider structures to be implemented in an integrated manner by municipalities in partnership with prefectures and others. Such initiatives include preventing the need for long-term care and countermeasures against frailty focused mainly on venues frequented by elderly people, the prevention of illnesses like lifestyle-related diseases preventing said illnesses from increasing in severity and supporting people's participation in work and society. It will also

apply incentives in aiming to eliminate the regional disparities in the length of healthy lifespans (16). Based on this policy, municipalities implemented integrated health services for older adults. As there are multiple laws and different departments in charge of each municipality, implementation tends to be segregated. Although medical specialists coordinate the entire program and prepare laws for collaboration, these policies must be implemented in cooperation with medical insurance personnel, nursing care insurance personnel, and medical institutions.

One of the duties of administrative dietitians working at public health centers in prefectures or cities with public health centers is to provide guidance and support based on monitoring and evaluating nutritional management conditions at specified food service facilities (2). Health crisis management duties related to specific food service facilities managed by public health centers were announced by the MHLW (18). According to these guidelines, nutritionally balanced meals should be provided safely even in disaster situations. Therefore, such facilities should be prepared for disasters at all times and should ensure that they are able to provide help during emergencies. Currently, there is a need for a practical disaster support system in which public health center dietitians play a coordinating role in health crisis management for their communities, and for measures to strengthen their collaboration skills.

Exercise 1 of the workshop conducted in Prefecture B consisted of 55-minute group work and 3-minute presentations by each group, in which participants considered internal and external environmental issues in promoting the creation of a food environment in the region using SWOT analysis. The creation of a food environment requires cooperation and collaboration not only between prefectural and municipal health and sanitation departments but also among a wide range of food-related businesses, from food production to distribution and sales (16).

Exercise 2 was identical in the two workshops. The exercise consisted of 40 minutes of group work and 3-5 minutes of presentations by each group on three points: what they thought after listening to the lectures, issues, and solutions, and what they "can do" and "want to do" from tomorrow. After a summary and encouragement session between the lecturers and all participants, the workshop concluded.

Questionnaire survey

A self-administered questionnaire was administered at the end of the workshops. The survey included the following information: organization, age, years of experience in community health, years of experience as a dietitian, understanding of and comments on each lecture and exercise (free text), reasons for attending the training, results of attending the workshop, and what was impressive about the

workshop (free text).

Survey items other than the free-text responses were calculated. Free-text descriptions were analyzed using reflexive thematic analysis (17). The reflexive thematic analysis consisted of the following six recursive stages: 1) familiarization with the data, 2) initial coding, 3) generation of the first theme, 4) review and development of the theme, 5) refinement and naming of the theme, and 6) writing. Specifically, the first author read the free-text descriptions of the data (Stage 1) and generated the codes (Stage 2). The codes were then aggregated into subcategories of potential semantic patterns, which were further aggregated into categories (Stage 3). The relationships between the categories and their conformity to the presupposed story were subsequently examined (Stage 4), and the scope and content of the themes were refined (Stage 5).

The survey completed by the participants included free text, which was divided into sentences that could have several meanings in the analysis, which were subsequently converted into data. The unit of analysis for this study was the text, which was structured by deleting unnecessary words, generalizing, and consolidating the writing style, and supplementing explanations. The subcategories were created by collectively classifying and naming them. A subcategory is the smallest unit of data that can be analyzed and has the potential to be grouped into a single category. A category is the largest unit that can be analyzed, with the subcategories grouped together and given appropriate names. Categories and subcategories were added to the above procedure and the frequencies were noted.

At the end of the workshop, written and oral

explanations regarding the purpose of the study, voluntary participation and cooperation for the study, appropriate handling of data, and publication of research results were provided. Responding to the questionnaire was deemed as informed consent. This study was approved by the Ethics Committee of Osaka Metropolitan University (application number 22–29; approved 25 July 2022). The study complied with the code of ethics of the World Medical Association (Helsinki Declaration).

2. Workshops for enhancing self-efficacy

Workshops for enhancing self-efficacy were held in Prefecture B in November 2022 and Prefecture C in December 2022, in collaboration with prefectural staff.

Participants

For both workshops, prefectural staff recruited administrative dietitians from the prefecture. A total of 30 prefectural or municipal administrative dietitians participated in the workshops held in Prefecture B, and 13 prefectural administrative dietitians participated in the training session held in Prefecture C.

Programs

The schedule for the workshops is presented in Table 2. Prior to the workshops, participants were asked to fill out a "reflection sheet same as the workshop 1 from the time of employment to the present, including affiliation, position, major accomplishments, efforts and achievements focused on, competencies acquired, milestones and impressions)." Additionally, they were asked to note their "daily concerns and issues in working," and "issues and daily thoughts regarding human resource development for administrative dietitians in their organizations," and to bring these reports to the workshop.

Table 2. The timetable of the workshop to enhance self-efficacy

Time	Contents	Lecturer
10:35~10:45	Introduction: Human resource development in the prefecture	Administrative dietitian of the prefecture
10:45~11:15	Lecture 1: New training program for administrative dietitians: what should be learned based on their career ladder	University faculty
11:15~12:15	Group work 1: Problems in daily work	Administrative dietitian of the prefecture
13:15~14:25	Group work 2: Reflection on daily work	Administrative dietitian of the prefecture
14:25~15:10	Lecture 2: Thinking about how to draw a career plan to reach your goals	University faculty
15:10~16:20	Group work 3: What kind of work do you want to do in the future?	Administrative dietitian of the prefecture
16:20~16:30	Encouragement and Summary	All staff and participants

The workshop comprised two lectures and three group sessions. Lecture 1 primarily introduced the training, the image of administrative dietitians from the perspective of themselves and other professionals, and the competencies required for administrative dietitians according to their career. Lecture 2 lasted 45

minutes and focused on the need to improve prior requirements to increase self-efficacy and the need for someone to consult with in order to improve and respond to the environment to prevent lowering self-efficacy.

The workgroups were arranged such that the region

of the organizations where they worked was a neighboring municipality, and at least one administrative dietitian from mid-career onward was assigned to each group, who served as the facilitator of group work. Group Work 1 was a 60-minute group work session on the challenges encountered during daily work. Group Work 2 involved reflecting on their work. Group Work 3 focused on how they wanted to work henceforth.

Questionnaire survey

The questionnaire survey was conducted as shown in Section 1.3.

RESULTS

1. Workshops aimed at enhancing collaboration skills

Questionnaires were completed and submitted by all 61 participants. Twenty-one (34%) participants belonged to prefectures, 12 (20%) to cities with health centers, and 28 (46%) to municipalities. Of the participants in the workshops held in prefectures A and B, 40-year-olds were the most common age group, and most of them had over 20 years of experience as dietitians (Table 3).

The understanding of participants of the workshop aimed at enhancing collaboration skills is shown in Table 4.

Table 3. Participants of the workshop to acquire the skill of collaborating with multiple stakeholders (n=61)

Working organization	Prefecture (21, 34%), City with public health centers (12, 20%), Municipality (28, 46%)
Age	20s (9, 15%), 30s (9, 15%), 40s (29, 48%), 50s or over (14, 23%)
Years of experience in community health	≤5 years (19, 31%), 6-10 years (7, 11%), 11-15 years (11, 18%), 16-20 years (11, 18%), >20 years (13, 21%)
Years of experience as a dietitian	≤5 years (9, 15%), 6-10 years (7, 11%), 11-15 years (7, 11%), 16-20 years (10, 16%), >20 years (28, 46%)
Reasons for attending the workshop (multiple responses)	<ul style="list-style-type: none"> • Because I wanted to think about my growth and how I want to work in the future during the training (25, 41%) • Because I wanted to get some hints for training junior staff and developing my organization's human resource development system (12, 20%) • Because I thought that understanding leadership theory and organizational theory was important for policy development (12, 20%) • Because the lecturers were attractive (9, 15%) • Because I was interested in the "administrative dietitian training program focusing on public health" (6, 10%)
Outcome of attending the workshop (multiple responses)	<ul style="list-style-type: none"> • I realized anew the importance of learning and decided to learn more than ever before (37, 61%) • I was able to think about my position and role in the organization (36, 59%) • I was able to think about how I want to work in the future (31, 51%) • My daily worries and anxieties were relieved a little (27, 44%) • I found what I "can do" and "want to do" from tomorrow (20, 33%) • I was able to better visualize my future growth (11, 18%)

Participants described comments of lecture 1 that application to the workshop and learning; expressing personal intent and removing inhibiting factors for enhancing self-efficacy; recognition of the nutrition department and role compared to other professions; understanding of the workshop content and expectations for our developing program; enhancing self-efficacy and improving skills; collaboration with other professions and skill enhancement; expectation for the evaluation system and the program; and recognition of nutritional skills and expectations for skill development.

Participants described comments of Lecture 2-1 that professional development and strategic thinking; impactful insights and inspiration; broadening perspectives and knowledge; collaboration and

interdisciplinary approach; personal growth and motivation; strategic thinking and professional vision; learning opportunity and self-reflection; purpose and collaboration; and empowering vision and skill development.

Participants described comments of Lecture 2-2 that policy enthusiasts; challenges and importance of creating impactful materials; the necessity of a broad range of knowledge and skills beyond nutrition; the significance of incorporating field perspectives; and the essential foundations for personal growth and skill development.

Participants described comments of Lecture 3 and Exercise 1 that impression and motivation; importance of attitude and continuous learning; preparation and practical examples; enhancing negotiation skills; and

collaboration and communication.

Participants described comments of Exercise 2 that mutual support and fresh perspectives; networking and collaboration; learning from different perspectives; personal and professional growth; and building

connections and finding encouragement.

Participants described what was impressive about the workshop application and learning; relevance and implementation; and networking and collaboration.

Table 4. Understanding of workshop to acquire the skill of collaborating with multiple stakeholders (n=61)

	Understood well	Understood	Somewhat poorly understood	Not understand at all
Lecture 1: What our research has revealed, roles of mid-career workers, and what they need to learn after mid-career	34 (56%)	26 (43%)	1 (2%)	0 (0%)
Lecture 2-1: How to build a strategy for administrative dietitians: practical "strategic devices" for mainstreaming nutrition.	19 (31%)	38 (62%)	4 (7%)	0 (0%)
Lecture 2-2: How to build a strategy for administrative dietitians: How to proceed with policy-making, which I learned while on secondment at the Ministry of Health, Labour and Welfare.	28 (46%)	33 (54%)	0 (0%)	0 (0%)
Lecture 3: Organization and work practices and Exercise 1: Issue clarification and negotiation skill	35 (57%)	25 (41%)	2 (3%)	0 (0%)
Exercise 2: Dietitians in the organization	30 (49%)	30 (49%)	1 (2%)	0 (0%)

2. Workshops for enhancing self-efficacy

Questionnaires were completed and submitted by all 44 participants. A total of 31 participants participated in the workshop in prefecture B; 7 (23%) belonged to prefectures, 4 (13%) to cities with health centers, and 13 (46%) to municipalities. Of the participants in the workshops held in prefectures B and C, 30-year-olds were the most common age group (Table 5).

According to the answer of outcomes of the workshop, most or all participants answered "yes" or "somewhat yes" to the following question: "Have the

workshop relieved any of worries and anxieties in your daily life?" "Have you been able to think about your position and role in the organization?" "Have you been able to reflect on your past efforts and deepen your thoughts about your strengths and weaknesses?" "Have you been able to think about how you want to work in the future?" "Have you been able to visualize your future growth and development?" "Do you think the contents of today's workshop will be useful for the human development of administrative dietitians in your organization?" "Have you found what you "can do" and "want to do" from tomorrow?" (Table 6)

Table 5. Participants of the workshop for enhancing self-efficacy (n=43)

Working organization	Prefecture (23, 53%), City with public health center (9, 21%)、Municipality (11, 26%)
Age	20s (7, 16%), 30s (12, 28%), 40s (13, 30%), 50s or over(11, 26%)
Years of experience in community health	≤5 years (16, 37%), 6-10 years (6, 14%), 11-15 years (5, 12%), 16-20 years (7, 16%), >20 years (11, 26%)
Years of experience as a dietitian	≤5 years (7, 16%), 6-10 years (10, 23%), 11-15 years (6, 14%), 16-20 years (6, 14%), >20 years (14, 33%)
Reasons for attending the workshop (multiple responses)	<ul style="list-style-type: none"> • Because I wanted to think about my growth and how I want to work in the future during the training (28, 65%) • Because I wanted to know the role and perspective of the new term and mid-career (18, 42%) • Because I was struggling with how to conduct my day-to-day business (15, 35%) • Because I was interested in the "administrative dietitians training program focusing on public health (15, 35%)

Table 6. Outcomes of the workshop for enhancing self-efficacy (n=43)

	Yes	More or less yes	More or less no	No
Have the workshop relieved any of worries and anxieties in your daily life?	17 (40%)	23 (53%)	3 (7%)	0 (0%)
Have you been able to think about your position and role in the organization?	18 (42%)	22 (51%)	2 (5%)	1 (3%)
Have you been able to reflect on your past efforts and deepen your thoughts about your strengths and weaknesses?	25 (58%)	18 (42%)	0 (0%)	0 (0%)
Have you been able to think about how you want to work in the future?	17 (40%)	24 (56%)	2 (5%)	0 (0%)
Have you been able to visualize your future growth and development?	6 (14%)	25 (58%)	9 (21%)	1 (3%)
Do you think the contents of today's workshop will be useful for the development of administrative dietitian in your organization? †	12 (28%)	27 (63%)	3 (7%)	0 (0%)
Have you found what you "can do" and "want to do" from tomorrow?	12 (28%)	29 (67%)	2 (5%)	0 (0%)

† One participant did not answer

Participants described comments of the relief provided by the workshop to some of their worries and anxieties in their daily life promoting collaboration and support in individual work settings; empathy and insights from cross-regional dietitians; seeking guidance and techniques for effective work approaches; shared concerns and lightened burdens; encouragement and empowerment through mutual understanding; learning from peers; sharing experiences and challenges; building communication channels for dietitians in different municipalities; discovering solutions and strategies for personal weaknesses; overcoming anxieties through professional networking; strengthening self-perception and problem-solving skills; exploring common worries and fostering supportive connections.

Participants described comments of the idea of contemplating your position and role in the organization has been evident that understanding personal roles and expectations; self-reflection and growth within the organization; recognizing positions and responsibilities; enhancing collaboration and professional development; aligning roles with organizational growth; navigating roles and responsibilities as dietitians; building competencies and strengthening connections; bridging administrative skills and dietitian roles; addressing career gaps and skill development; perspectives and positioning among peers; sharing insights and building a common understanding; embracing challenges and defining roles; strengthening collaboration through effective communication; embracing office support and strengthening competencies; assessing competencies; and planning for growth.

Participants described comments of reflection on

their past efforts and the deepening their thinking about their strengths and weaknesses that finding strengths and weaknesses through group collaboration; examining work objectively using reflection sheets; discovering personal growth through self-reflection; self-assessment for personal improvement; recognizing strengths and weaknesses for career development; enhancing self-awareness for skill development; deepening thoughts through reflection and career sheets; overcoming weaknesses; and embracing strengths through reflection.

Participants described comments of considering their desired approach to work in the future that promoting work-life balance by utilizing information and communication technology and telecommuting, expanding perspectives and career planning through reflection, nurturing junior staff, enhancing the role of dietitians, self-reflection, and clarifying personal aspirations, and exploring expertise and adapting flexibly.

Participants described comments of visualizing their future growth and development building knowledge and expertise; setting goals and visualizing growth; acting and leveraging strengths; continuous improvement and policy advocacy; and exploring future possibilities.

Participants described comments of useful contents of today's workshop for the human development of administrative dietitians in their organization that implementing strategies for self-efficacy and skill enhancement; promoting collaboration and understanding across professions; setting goals and envisioning growth; cultivating teaching roles and career planning; enhancing understanding and collaboration in the workplace;

future growth and career guidance; utilizing training and developing programs; establishing a talent development system; and seeking practical implementation.

Participants described comments of findings on what they can do and want to do from tomorrow's professional development strategies; goal clarity and time management; communication and networking skills; knowledge acquisition and confidence building; long-term planning and policy collaboration; mentorship and career growth; task prioritization and staffing advocacy; effective communication and self-evaluation; leadership development and talent management; excellence in job performance and growth opportunities; career expansion; and educational pursuit.

Participants described what was impressive about the workshop as visionary career planning, balancing responsibilities, skill acquisition for leadership, work-life integration, and long-term goal setting.

DISCUSSION

Based on the responses to the questionnaire, it seems that most of the objectives of the workshops were understood. Reflecting on one's activities seemed particularly effective. Kolb presented an experiential learning model comprising concrete experience, reflective observation, abstract conceptualization, and active experimentation (20). Reflection has great significance as a tool for self-discovery, learning, critical thinking, and interpersonal growth. By engaging in regular reflection, we can gain valuable insights, make better choices, and evolve as individuals. The practice of reflection has been frequently reported in nursing, but not by dietitians (21). The comments described in our workshops suggest that although it is difficult for Japanese administrative dietitians to reflect on their work environments, active reflection is necessary.

Nutrition is the process by which living organisms receive food necessary for their growth and health. Food is provided by various groups, including businesses engaged in the manufacturing, processing, distribution, or sale of foods, or the provision of meals. Nutrition is a critical component of health and development. Better nutrition is related to improved infant, child, and maternal health; stronger immune systems; safer pregnancy and childbirth; lower risk of non-communicable disease; and longevity. A person in one department or team should be ready for active involvement and contribution to another department or team, which is crucial for fostering cooperation and collaboration within an organization. The benefits of contributing to other departments include knowledge and experience sharing, understanding the organization's overall vision, career growth, and expanded opportunities. The Ottawa Charter noted that health promotion extends beyond healthcare, and

places health on the agenda of policymakers in all sectors and at all levels, directing them to be aware of the health consequences of their decisions and to accept their responsibilities for health (22). Nutrition is linked to this in several ways. Administrative dietitians are not only required to collaborate with such organizations and professions but also can collaborate with them.

The MHLW has provided pioneering examples of multi-departmental and multi-professional collaboration in its annual report on the progress of nutrition improvement efforts in Japan based on the Tokyo Nutrition Summit 2021 (23). Human resource development in the basic policy of Healthy Japan 21 (third term) also indicates that support should be provided to promote multidisciplinary collaboration (1). As the importance of multidisciplinary collaboration has been recognized, skill-building for collaboration is needed.

Administrative dietitians must not only collaborate with other professions and organizations (24) but also with dietitians in other organizations and with other administrative dietitians. In all workshops, participants stated that it was good to interact with other administrative dietitians. This is because an organization rarely has more than one dietitian (3), and dietitians find few opportunities to interact with other dietitians in the same administrative area during daily work. Consultations related to the work of municipal administrative dietitians are usually restricted to the workplace, and although health centers are not utilized frequently, they could possibly strengthen cooperation and support services with municipal health center dietitians (25). One of the duties of prefectural administrative dietitians is to provide support to municipalities within their jurisdiction (2). To dispel the sense of isolation among administrative dietitians, a system of mutual collaboration, led by prefectural administrative dietitians, should be established.

The basic policy of Healthy Japan 21 (third term) calls for the comprehensive promotion of national health through the development of health promotion that leaves no one behind, and the promotion of more effective measures toward the realization of a sustainable society in which all people can live healthy and enriched lives (1). At the Tokyo Nutrition Summit, the Japanese government committed to developing a nutrition policy that leaves no one behind (26). Accounting for all individuals, especially administrative dietitians, who are key players in nutrition policy is necessary for achieving this. Both types of workshops were conducted in only two prefectures; however, it is hoped that they will also be conducted in other prefectures.

ACKNOWLEDGMENTS

The authors are grateful to all the participants who participated in the workshops. The authors also thank

the Office of Nutrition, Health Service Division, Health Service Bureau, Ministry of Health, Labor and Welfare for their cooperation and advice regarding this study. This research was funded by a Grant-in-Aid for Scientific Research from the Ministry of Health, Labour and Welfare (grant number 20FA1008).

REFERENCES

1. Ministry of Health, Labour and Welfare: Revision of a basic direction for comprehensive implementation of national health promotion. <https://www.mhlw.go.jp/content/001102474.pdf>
2. Ministry of Health, Labour and Welfare: Basic guidelines for health promotion and improvements of nutrition and dietary habits by administrative dietitians in the community. <https://www.mhlw.go.jp/content/10900000/000637215.pdf>
3. Ministry of Health, Labour and Welfare: Overview of regional health and health promotion project reports in 2019. <https://www.mhlw.go.jp/toukei/saikin/hw/c-hoken/19/dl/R01gaikyo.pdf>
4. Self-Efficacy: The Exercise of Control (Bandura A). 1997. W.H. Freeman.
5. Minouchi Y. The effect of perceived task importance on the generality of self-efficacy. *Jpn J Educ Physiol* 41: 57-63. 1993.
6. Fujiu H. A study on the relationships between kyosyu (hand raising), self-efficacy, outcome-expectancy and outcome value. *Jpn J Educ Physiol* 39: 92-101. 1991.
7. Ito T. Self-efficacy, casual attribution and learning strategy in an academic achievement situation. *Jpn J Educ Physiol* 44: 340-349. 1996.
8. Schunk DH. Ability versus effort attributional feedback: differential effects on self-efficacy and achievement. *J Physiol* 75: 848-856. 1983.
9. Major B, Cozzarelli C, Sciacchitano AM et al. Perceived social support, self-efficacy, and adjustment to abortion. *J Personal Soc Physiol* 59: 452-463. 1990.
10. Conn VS. Older adults and exercise: path analysis of self-efficacy related constructs. *Nursing Res* 47: 180-189. 1998.
11. Bandura A, Schunk DH. Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *J Pers Soc Psychol* 41: 586-598. 1981.
12. Bandura A, Cervone D. Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *J Pers Soc Psychol* 45: 1017-1028. 1983.
13. Bandura A, Reese L, Adams NE. Microanalysis of action and fear arousal as a function of differential levels of perceived self-efficacy. *J Pers Soc Psychol* 43: 5-21. 1982.
14. Igarashi M, Yoshida T. Project management self-efficacy and related factors in municipal dietitian. *Jpn J Nutr Diet* 69: 148-159. 2011.
15. Ishikawa M, Abe K, Yoshiike N, et al. The competencies according to career ladder required for administrative dietitians -summary of on the output from group work activity in training session by public health division of the Japan Dietetic Association-. *J Jpn Diet Assoc* 58: 726-735. 2015.
16. Ministry of Health, Labour and Welfare: Strategic initiative for a healthy and sustainable food environment. <https://sustainable-nutrition.mhlw.go.jp/en>
17. Cabinet Office. Basic policy on economic and fiscal management and reform 2018 ~realizing sustainable economic growth by overcoming the decreasing birth rate and aging population ~. https://www5.cao.go.jp/keizai-shimon/kaigi/cabinet/honebuto/2018/2018_basic_policies_en.pdf
18. Ministry of Health, Labour and Welfare. Guidance and support for nutrition management at specified food service facilities. <https://www.mhlw.go.jp/content/10900000/000637208.pdf>
19. Campbell KA, Orr E, Durepos P. Reflexive thematic analysis for applied qualitative health research. *Qual Rep* 26: 2011-2028. 2021.
20. Morris TH. Experiential learning—a systematic review and revision of Kolb’s model. *Interact Learn Environ* 28: 1064-1077. 2020.
21. Beam RJ, O'Brien RA, Neal M. Reflective practice enhances public health nurse implementation of nurse-family partnership. *Public Health Nurs*. 27: 131-139. 2010.
22. World Health Organization. The Ottawa Charter for Health promotion. <https://www.paho.org/en/documents/ottawa-charter-health-promotion>
23. Ministry of Health, Labour and Welfare. Nutrition policy in Japan to leave no one behind - for achieving sustainable societies - pioneering examples of multi-sectoral collaboration in 2023. <https://www.mhlw.go.jp/content/001092503.pdf>
24. Sudo N, Sawaguchi M, Yoshiike N. Nationwide survey on municipalities' preparedness for provision of food and nutrition assistance and technical support from public health centers after disasters. *Jpn J Public Health*. 58: 895-902. 2011.
25. Yoshita K. Investigation and utilization of data through cooperation between prefectures and cities. *J Natl Inst Public Health* 61: 424-429. 2012.
26. Ministry of Health, Labour and Welfare. Nutrition policy in Japan to leave no one behind - for achieving sustainable societies - <https://www.mhlw.go.jp/content/000847743.pdf>

