

assuming a relaxed seated position for 10 min, the subjects performed a mental arithmetic task for 60 min followed by relaxation for 30 min, and then a rest for 10 min. The mental arithmetic task is a method of adding numbers without using tools. Every subject performed both the control-load and aroma-load tests under the same protocol, while the ECG was measured. They smelled *lavandula angustifolia* during the aroma-load.

Result We analysed the power spectrum of high and low frequencies. The P1 (low frequency)/P2 (high frequency) was defined as the ratio of P1 to P2. There was no change in the P1/P2 of 2 out of 3 subjects by using the aroma. Subjects A and B could avoid mental stress by using the aroma during the mental arithmetic operation.

Discussion In an analysis of the power spectrum in the R-R interval times, the high and low frequencies in the physiological index of stress loading suggest that the aromas have an effect on the autonomic nervous system. As the strain on sympathetic nerve was relaxed, we conclude that the aroma affected the sympathetic nerves. Thus, we conclude that the aroma affected a sympathetic nerve, relaxing the strain on it.

391 **QUANTIFYING COMPETENCIES OF OCCUPATIONAL HEALTH NURSES IN JAPAN**

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Introduction Occupational health nurses can achieve high performance so that the competencies necessary for occupational health nursing practices are being acquired. The purpose of this study was to clarify how occupational health nurses are in possession of competencies required for occupational health nursing practices in Japan.

Methods An anonymous, self-administered questionnaire survey was conducted by mail. The questionnaires were distributed to 357 Japanese occupational health nurses and 211 were collected. (response rate, 56.3%). 21 of 211 were excluded because of incomplete responses and 190 were analysed. We asked the rate at which they possessed 40 competencies developed by Kono, *et al.* All competencies were rated on a 7-point Likert scale (1=Never, 7=Always). Data were collected between September 2016 and January 2017. We calculated descriptive statistics for all variables. As for the comparison of competencies' scores by years of experience as occupational health nurses, the Tukey HSD test was used. This study was approved by the ethical review board of Yokkaichi Nursing and Medical Care University.

Results The mean score of 8 competencies was more than 5.5 points. The mean score of 3 competencies was less than 4.5 points. All competencies' scores differed significantly by years of experience as occupational health nurses.

Discussion The competencies with high scores were common to nurses who had awareness of themselves as professionals, valuing human relations with clients, and supporting clients with respect. Therefore, we considered that these were competencies that were easy to acquire for occupational health nurses who learned nursing science. We also considered that some competencies might be low because nurses were not able to acquire them without opportunities for experience and activity.

562 **DEVELOPMENT OF A GROUP/ORGANIZATION-FOCUSED DIAGNOSTIC SHEET FOR OCCUPATIONAL HEALTH NURSING**

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Background Group/organization-focused quality nursing practices are expected of occupational health nurses, as the maintenance and promotion of the health of workers cannot be achieved without the wellbeing of the group/organisation in which they work.

Purpose In this research we developed a new sheet integrating diagnosis, outcome, and organisational support, in which the entire nursing process should be covered.

Methods Cases involving major workplace health issues were subject to discussion among members consisting of 3 nursing diagnosis researchers and 9 occupational health nursing specialists. During the discussion, Herdman Nursing Process, NANDA-I Nursing Diagnosis, and NIC-categorised Nursing Intervention were used for references.

Supervision by nursing diagnosis research specialists, advice from the special committee members of JAOHN, and opinions of nationwide working-group members were obtained.

Results The findings of the discussions, followed by qualitative analyses, were summarised for use in the sheet development.

Nursing Diagnosis				
Definition				
Defining Characteristics (Sign or symptom (Objective or subjective cue))	Related Factors (cause,contributing factor) ./Risk Factor (Determinant(increase risk))	Nursing Outcome		Opinion / Question
		↓Number of corresponding Defining Characteristics	Nursing support ↓Number of Nursing Outcome	

Abstract 562 Figure 1 Diagnostic sheet for occupational health nursing