EXAMINATION OF A DISTRICT WITH THE WINDSHIELD METHOD AND THE OMAHA SYSTEM

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ABSTRACT

The Windshield method is a method in which the population in the targeted area is diagnosed through observation. The Omaha system, one of the eight classification systems accepted by the American Nurses Association, is a nursing information system consisting of standard codes and concepts. This study aims to evaluate the usability of the Windshield method and the Omaha system in evaluating the determined district. The universe of the study conducted in 2017 consists of 39 districts of the province of Istanbul, and the district examined by drawing lots was determined as the sample. While evaluating the region, the Windshield observation form, Omaha System Problem Classification List, Problem Assessment Scale, and Intervention Chart were used. Among the most prominent problems of the region are the problems of "unplanned urbanization", "sanitation", and "substance addiction". According to the Omaha system, four current problems were identified as "sanitation" from the Environmental Area, "workplace safety in the living neighbourhood", "housing", and "substance use" from the area of health behaviors. In the Problem Evaluation Scale, on the other hand, it was determined that the public's knowledge about the identified problems was generally at a "basic level" and the problems were at a "serious level". Among the nursing interventions that can be made according to the Intervention Scheme, "Teaching Guidance Counseling" and "Case Management" are among the initiatives determined predominantly.

Key words: Community diagnosis, Omaha system, Windshield.

INTRODUCTION

The Windshield method is a method in which the diagnosis of the society in the targeted region is made through observation (Allender et al.,2004). In this method, which can be performed by driving or walking, the examination is conducted under the headings of the buildings in the region, open spaces, regional borders, common areas, transportation, people on the street, findings of destruction in the living space, ethnicity, religion, politics, and media (Truglio-Londrigan, &Lewenson,2017).

The Omaha system was developed by the Visiting Nurse Association in the 1970s (Topaz et al,2013). The system is used in the identification of the individual, family, and society by nurses (Allender et al.,2004). It is one of the eight classification systems proposed by the American Nurses Association (İskender, & Kaplan,2020). The system consists of three parts, which are the problem classification list, the intervention scheme, and the problem rating scale (Omaha System,2005; Martin &Bowles,2008).

In the Problem Classification List, 42 problems have

been identified and evaluated at the level of individual, family and society (Martin et al.,2011). At the same time, problems are collected under the headings of environmental, physiological, and psychosocial areas. The intervention scheme consists of categories, goals and individual initiatives. Teaching, guidance and counseling (GaC), Treatments and Procedures (TaP), Surveillance (S), and Case Management (CM) initiatives can be determined from the intervention scheme. In the problem rating scale, knowledge, behavior, and status criteria are evaluated (Erdoğan et al.,2017; Martin et al.,2011).

There is a gap the determining problems in the community level. The Omaha System has the potential to address existing gaps by offering a framework for the electronic exchange of problems, interventions, and outcomes. To lay the groundwork for future community-based intervention studies using this standardized terminology, feasibility studies are necessary. The using of the Omaha system in the community level is limited.

This study aims to identify problems in the determined area using the Windshield method and to evaluate the feasibility of the Omaha System.

2. MATERIALS AND METHODS

The population of the study conducted in 2017 consisted of 39 districts of Istanbul, and the district examined was determined as the sample by drawing method. Since Windshield is an observation method open to the public, ethics committee approval was not obtained. While evaluating the region, the Windshield observation form, Omaha System Problem Classification List, Problem Rating Scale and Intervention Scheme were used.

Measures

Omaha System, is a research-based and standardized terminology widely utilized by public health nurses within public health information systems (Martin, 2005). The Omaha System encompasses three interconnected components serving distinct functions: the Problem Classification Scheme for assessment, the Intervention Scheme for care planning, and the Problem Rating Scale for Outcomes for evaluation (Martin, 2005). Furthermore, a community-level modifier incorporated within the Problem Classification Scheme facilitates the documentation of community-level assessments, interventions, and outcomes. Thus, the Omaha System provides an effective framework for systematically capturing community observation data.

The instrument consists of a checklist featuring 11 specific problems, along with associated signs and symptoms, categorized into the three domains of the Omaha System's Problem Classification Scheme. In this system, the definitions of problems, signs, and symptoms are broader than those typically found in conventional medical models. Problems are characterized as "unique client concerns, needs, strengths, issues, foci, or conditions affecting any aspect of the client's well-being"; signs refer to "objective evidence about a client's problem"; and symptoms denote "subjective evidence regarding a client's problem" (Martin, 2005, p. 465). Each domain is detailed below, accompanied by examples of problems and corresponding sign/symptom observations at the community level.

1. Environmental Domain: Defined as "material resources and physical surroundings both inside and outside the living area, neighborhood, and broader

Table 1: Problem Rating Scale-1

Knowledge	Basic level - 3 points
Behavior	Inconsistent-3 points (In terms of basic knowledge, people throwing litter on the streets were observed.)
Status	Serious-2 (The presence of garbage in the area, open litter boxes.)

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community," this domain includes problems such as Residence, Neighborhood/Workplace Safety, Sanitation, and Income. For instance, an observation of "structurally unsound" conditions within the Residence problem may be evidenced by the presence of broken windows throughout a neighborhood.

2. Psychosocial Domain: This domain is characterized as "patterns of behavior, emotion, communication, relationships, and development." The problems in this category encompass Communication with Community Resources, Social Contact, Interpersonal Relationships, and Spirituality. An illustrative example within the Social Contact problem is the observation of "limited social contact" in a community setting, such as when an island community becomes isolated during winter months due to the suspension of ferry services from the mainland.

The Health-related Behaviors Domain, defined as "Patterns of activity that maintain or promote wellness, promote recovery, and decrease the risk of disease" includes the problems of Nutrition, Substance use, and health care supervision.

RESULTS

The four problems were identified in the study. The first problem was the sanitation. The domain was from Environmental Domain. The priority was actual. The modifiers were society. The details are given in Table 1 and Table 2.

The second problem was the residence. The domain

Table 2: Intervention Scheme-2

Category	Goal	Individual Initiatives
GaC	Environment	Removal of dirty materials
S	Environment	Removal of dirty materials
CM	Environment	Removal of dirty materials Legal reinforcement Making the living space convenient Cleanliness

Table 3: Problem Rating Scale

Knowledge	They are aware of the status but do not know where to apply. (Very little-2)
Behavior	1-Inappropriate Although they are aware of the hazards, they do not take precautions.
Status	3-Medium level

Table 4: Intervention Scheme

Category	Goal	Individual Initiatives
CM	Environment	Reporting hazard
GaC	Environment	Appropriate measures
CM	Environment	Appropriate measures
CM	Environment	Making living spaces convenient/safe

Table 5: Problem Rating Scale

Knowledge	2- Very little
Behavior	Could not be evaluated.
Status	2-Serious (Living space should be made convenient.)

Table 6: Intervention Scheme

Category	Goal	Individual Initiatives
CM	Safety	Waste disposal
		Environmental safety
		Frequency of events
		Legal practice
		Structural problems
S	Safety	Frequency of events
		Monitoring safety risks
GaC	Infection control measures	Environmental cleaning
CM	Infection control measures	Environmental cleaning
S	Infection control measures	Environmental cleaning

was from Environmental Domain. The signs and symptoms were steep unsafe stairs and narrow building entrances. The priority was actual. The modifiers were society. The details are given in Table 3 and Table 4.

The third problem was the neighborhood/workplace safety. The domain was from Environmental Domain. The signs and symptoms were high pollution levels, violence reports/threats, and Physical hazards. The priority was actual. The modifiers were society. The details are given in Table 5 and Table 6.

The third problem was substance use. The domain was from the Health Behaviors Domain. The signs and symptoms were stimulants/drugs, use of street drugs, smoking/smoking of tobacco products, and selling/buying illegal substances. The priority was actual. The modifiers were society. The details are given in Table 7 and Table 8.

Discussion and Conclusion

Similar to the study conducted in the Windshield project covering Istanbul, neighborhood workplace safety and sanitation problems are prevalent

Table 7: Problem Rating Scale

Knowledge	4-(They are aware of the status).
Behavior	3-Inconsistent
Status	1-very serious

Table 8: Intervention Scheme

Category	Goal	Individual Initiatives
GaC	Quitting substance use	The harms/effects of substance use
CM	Quitting substance use	Detox, treatment, counseling
GaC	Stress management	The ability to cope
		Relieving tension and anxiety
		Meditation
CM	Medical treatment/dental treatment	Psychological/psychiatric evaluation
TaP	Early diagnosis/scanning	Addiction level
CM	Behavioral change	Reducing/stopping substance, tobacco or alcohol use

(Nahcivan et al.,2014).In addition, in a study conducted in Canada, it was observed that the results of the nursing intervention performed according to the Windshield system were successful (McGillivray et al.,2017). As a result of the conducted study, it was observed that the Omaha System and Windshield method can be used in community diagnosing and public health nursing practices and it is thought that the study will contribute to the literature.

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