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Evaluation of School Health Nursing Practice in Acute Health Problems with the Omaha

Omaha Sistem Tabanlı Elektronik Sağlık Kaydı Programı ile Akut Sağlık Sorunlarında Okul Sağlığı Hemşireliği

ABSTRACT

Objective: Healthcare professionals use the Omaha System to diagnose problems in healthy and sick people, identify interventions, and evaluate their outcomes. The main aim of this research was to evaluate the effectiveness of combining the Omaha System-Based Electronic Health Record Program and School Health Nursing Practices in managing acute health issues.

Methods: The data for this study was collected using a retrospective-descriptive approach, using the Nightingale Notes Champ Software and the health infirmary notebook.

Results: The mean age of the participants was 10.30 ± 1.57 , with 56.1% being female students. A total of 17 problems were identified and diagnosed 1230 times among the students who visited the health infirmary during the study period. The issues were in the "Physiological" domain 88.9%, Psychosocial" 7%, and "Health Behaviors" 4.1%. The most commonly identified health issues were related to "Skin" 24.2%, "Pain" 20.7%, "Digestive-Hydration" 10.7%, "Circulation" 8.1%, "Oral Health" 7.0%, "Neuromuscular Function" 6.1%, "Mental Health" 5.1%. The Intervention Scheme for the seven most frequent health problems included 17 targets and 1007 nursing interventions, with the Surveillance category being the most commonly used intervention.

Conclusion: The Omaha system has significantly contributed to decision-making based on retrospective data by making intervention processes more systematic in acute health practice in the school environment. As an evidence-based method, the Omaha system supports improving quality and professionalism in school nursing.

Keywords: Omaha system, School health nursing, Retrospective study, Student, Electronic health records

ÖΖ

Amaç: Omaha Sistemi, sağlık profesyonelleri tarafından sağlıklı ve hasta bireylerin sorunlarını teşhis etmek, müdahaleleri belirlemek ve sonuçlarını değerlendirmek için kullanılır. Bu araştırmanın amacı, Omaha Sistemine Dayalı Elektronik Sağlık Kaydı Programının akut sağlık sorunlarıyla başa çıkmada okul sağlığı hemşireliği uygulamaları ile birlikte etkinliğini değerlendirmektir.

Yöntemler: Çalışma retrospektif-tanımlayıcı tasarım tipindedir. Veriler Nightingale Notes Champ Yazılımı ve sağlık revir defteri aracılığıyla toplanmıştır.

Bulgular: Katılımcıların yaş ortalaması 10,30 ± 1,57 olup, %56,1'i kız öğrencilerden oluşmaktadır. Çalışma süresi boyunca sağlık revirini ziyaret eden öğrenciler arasında 17 problem, toplam 1230 kez tanılanmıştır. Saptanan problemlerin %88,9'u Fizyolojik, %7'si Psikososyal ve %4,1'i Sağlık Davranışları alanındadır. En sık tespit edilen sağlık sorunları sırayla; Deri %24,2, Ağrı %20,7, Sindirim-Hidrasyon %10,7, Dolaşım %8,1, Ağız Sağlığı %7,0, Nöromüsküler Fonksiyon %6,1, Ruh Sağlığı %5,1 ile ilgiliydi. En sık görülen yedi sağlık sorunu için Müdahale Şemasında 17 hedef ve 1007 hemşirelik müdahalesi uygulandı. Sürveyans en yaygın kullanılan girişim şeması kategorisi olarak bulundu.

Sonuç: Omaha sisteminin kullanılması, okul ortamında akut sağlık uygulamalarında müdahale süreçlerini daha sistematik hale getirerek, geçmişe yönelik veriye dayalı karar verme süreçlerine önemli bir katkı sağlamıştır. Omaha Sistemi kanıta dayalı bir yöntem olarak okul hemşireliğinin kalitesinin ve profesyonelliğinin artmasını destekler.

Anahtar Kelimeler: Omaha sistemi, Okul sağlığı hemşireliği, Retrospektif çalışma, Öğrenci, Elektronik sağlık kayıtları

INTRODUCTION

The American Academy of Pediatrics (AAP) defines the school nurse as a unique professional nursing area that ensures students' quality of life, academic success, and lifelong success¹. World Health Organization (WHO) reported that schools are the most suitable environments for maintaining and promoting health. For a considerable time, the World Health Organization (WHO) has acknowledged the correlation between health and education, understanding the significant potential of schools in safeguarding student health and well-being.² With this in mind, school nurses play a critical role in achieving a healthy school community. Determining the health problems of the general health levels of the school community and protecting and improving health are the basis of school nursing studies.^{3,4} In this context, to record and report applications. Its contribution to school health nursing is very important.

According to the Address Based Population Registration System (ADNKS) results in Turkey, 26.9% of the population comprises children aged between 0 and 17. In Turkey, community health centers carry out school health services. However, in Turkey with such a high young population, school health services remain below international standards compared to developed countries.⁵ In Turkey, there is no nurse in every public school; school nurses are generally assigned by the state to boarding schools where children with special needs are educated. For this reason, school health services, which are extremely necessary and important, such as intervention in acute and emergency situations, health diagnosis, periodic examinations, health education, health promotion programs, environmental health practices, and case management, cannot be implemented. However, the Ministry of National Education has started school nursing studies by publishing the "School Nursing Regulation" as of 2022.⁶ In this context, the results of school health research are gaining more importance in order to create guidelines for school nursing services.

Nursing classification systems such as the Omaha System are very important in increasing the studies on school health services.^{7,8} The Omaha System has been used in clinical, home care, primary healthcare, elderly care, hospice, and workplaces. Studies have proven its validity, reliability, and usability in many countries and cultures.⁹⁻¹¹

A limited number of studies were found on using the national and international Omaha System in school-based health practices.^{7,12,13} The use of the Omaha system in school health nursing allows nurses to regularly assess the

health status of students, detect health problems early, and provide effective interventions. The follow-up process in school nursing is critical in continuously monitoring the child's health status and development and identifying possible risks in advance. The Omaha system ensures that this process is carried out structured and systematically.

The Omaha System

The American Nurses Association (ANA) recognizes the "Omaha System" as one of the earliest and most sophisticated classification systems (Figure 1).^{14,15}

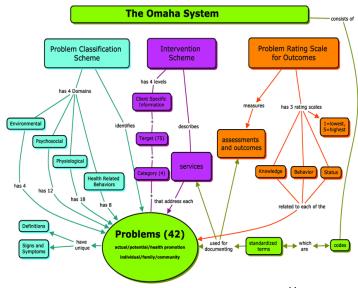


Figure 1. The Omaha System concept¹⁴

Nursing and other healthcare professionals utilize the "Omaha System" to diagnose problems in healthy and sick people, develop solutions, and assess their effectiveness. The system consists of three main components: (1) "Problem Classification Scheme," (2) "Intervention Scheme," and (3) "Problem Rating Scale." Problem Classification Scheme (PCS) is where nursing diagnoses are classified. It examines the individual's health problems in a total of four areas, including environmental (4), psychosocial (12), physiological (18), health behaviors (8), and 42 problems in these areas. There are clusters of signs and symptoms (335 signs and symptoms) under the problems. Scope determinants (individual, family, and society) and severity determinants (actual, potential, and health promotion) that determine the problem's nature are used to diagnose problems. The Intervention Scheme (IS) allows practitioners to classify, analyze, and record their activities and interventions, creating a bridge between the problem identified and the outcomes of care. The enterprise scheme consists of three successive phases: (1) enterprise categories, (2) targets, and (3) individual

enterprise/knowledge. The intervention scheme category classifies nursing interventions as Educational Guidance and Counselling, Treatment and Procedure, Case Management, and Surveillance. Nursing interventions planned in line with the intervention categories are explained using the "targets (76 targets)" list.¹⁴⁻¹⁶ The Problem Rating Scale (PRS) is a measurement tool that assesses the problem's severity and care outcomes. The knowledge subscale aims to determine what the individual knows and how much he or she understands about the related problem. The behavior subscale aims to evaluate the individual's practices and skills. The status subscale focuses on determining the status or development of the individual.¹⁴⁻¹⁶ The Problem Rating Scale is a five-item Likert-type scale. Each problem is evaluated with a score of 1 to 5, using the dimensions of 'Knowledge,' 'Behavior,' and 'Situation.' High scores in knowledge and behavior dimensions are directly proportional to positive knowledge and behavior. High scores in the situation dimension indicate fewer problem-specific signs and symptoms ^{10,14} The system has been actively used in student practices and research in Turkey since 1998.

AIM

The study's primary objective was to assess school health nursing practices concerning acute health issues, utilizing the Omaha System for evaluation.

Research Questions

1. What are the most common acute health problems observed in students using the Omaha System?

2. What are the school health nursing practices related to acute health problems using the Omaha System?

METHODS

Design and Sample

The study utilized a retrospective-descriptive study design for its conduction. The data of the research were collected within the scope of the Karabük University Faculty of Health Sciences Public Health Nursing course application. Within the scope of the application, students did a school health nursing internship within the scope of a public health nursing course in a primary school in Karabük. Due to the lack of school nurses at the school, a health unit was established and carried out school health nursing practices three days a week. Applications made in the health infirmary book were recorded. The data of the research were collected between February and May 2019. In this context, 314 children aged 7-11 applied to the health unit. The Omaha System was used during the diagnosis and applications.

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Measures

Data for this study were gathered using the Health Infirmary Book and the Nightingale Notes software, which is built upon the Omaha System.

Health Infirmary Book: Date, name, surname, age, class, gender, the reason for application, interventions, and evaluation information are included in the health infirmary book.

Nightingale Notes Champ Software (NN): Nightingale Notes (Champ Software, Mankato, MN, USA) is a paid software system, recording, and reporting system based on Omaha System terminology to document nursing practice and make nursing practice visible. The system consists of two parts. In the first part, individuals' demographic and health information are recorded. The second part of the system consists of the Omaha System Problem Classification Scheme, Intervention Scheme, and Problem Rating Scale. Nightingale Notes Software allows data reports to be downloaded in Excel, PDF, or graphical formats, providing flexibility for different analysis and presentation needs. This feature enhances the efficiency and versatility of reporting processes. The Turkish validity and reliability of the Omaha System was investigated in 2006.10, 17, 18

The Omaha System's Problem Classification Scheme and Intervention Scheme components were used in the current study. The Problem Rating Scale could not be used because the students who applied to the health unit could not be followed up.

Ethical Consideration

The study obtained ethical approval from the noninterventional clinical research ethics committee at Karabük University (January 20, 2022 /803). Institutional permission was obtained from the schools where the study data was collected. Since this study was carried out within the scope of the Nursing Department of the Faculty of Health Sciences of Karabük University public health practice course, the institution's permission was obtained.

Data Collection and Analytic Strategy

The analyses of the study were conducted between February 2022 and June 2022. The demographic details of the cases, the reason for their application, diagnosis, and interventions were recorded in the Nightingale Notes using the Champ Software program. According to the Omaha System's codes and concepts, records were evaluated based on real risks and issues. The data obtained from the Nightingale Notes program in an Excel sheet were transferred to the IBM SPSS 21.0 (IBM SPSS Corp., Armonk, NY, USA) statistical software, and the data were analyzed. Descriptive statistical methods (number, percentage) were used to analyze the data. Data were visualized using the 'Matrix visualization' graphics, as shown in Figure 3. As the number of interventions increases, the color shade darkens.

RESULTS

(n=314)

The participant's average age was 10.30 ± 1.57, 43.9% (n=138) were male students, and 56.1% (n=176) were

female.

Children's Health Problems According to the Problem **Classification Scheme**

In the cases who applied to the health infirmary, a total of 17 problems were diagnosed 1230 times. According to the Omaha system, all issues were diagnosed individually and individually. 88.8% (n=1092) of the problems were Physiological, 7.0% (n=86) were Psychosocial, and 4.2% (n=52) were Health Behaviors domain.

Domain and Problems	Signs/Symptoms	n	%	Domain and Problems	Signs/Symptoms	n	%
Physiological				Physiological			
Skin	Wound- bruise	284	12.19	Respiratory	Abnormal breath sounds	21	0.90
	Inflammation	120	5.15		Abnormal breathing types	18	0.77
	Lesion	42	1.80		Runny nose/nasal congestion	47	2.02
	Itching	2	0.09		Cough	18	0.77
	Stream	4	0.17		Audible breathing	5	0.21
	Delay in incision wound healing	1	0.04	Urinary Function	Incontinence	11	0.47
	Discomfort / pain	253	10.86		Burning/pain when urinating	24	1.03
Pain	Avoiding the aching area /				Difficulty urinating	6	0.26
	protective movement	185	7.94				
	Grimace	184	7.90		Urgency/frequent urination	18	0.77
	Restlessness	18	0.77	Bowel Function	Cramping/abdominal discomfort	46	1.97
	Pale appearance / sweating	32	1.37	Cognitive Status	Repetitive speech/behavior	3	0.13
Digestive -	Nausea and vomiting	131	5.62		Lack of concentration	2	0.09
Hydration	Reflux	35	1.50	Psychosocial			
	Loss of appetite	83	3.56	Mental Health	Difficulty in managing stress	36	1.55
	Electrolyte imbalance	40	1.72		Somatic complaints	9	0.39
	Chewing/ swallowing/				Limited focus/attention	44	1.89
	indigestion	8	0.34				
	Indigestion	31	1.33		Sadness / hopelessness / low self-		
					esteem	23	0.99
Circulation	Oedema	60	2.58		Difficulty in anger management	10	0.43
	Fainting / dizziness	34	1.46		Restless/ agitated/ aggressive	8	0.34
	Abnormal blood pressure				Anxiety / undefined fears	3	0.13
	readings	11	0.47				
	Temperature change in the			Interpersonal	Few shared activities	5	0.21
	affected area	21	0.90	Relations			
	Pain/cramp in extremities	3	0.13		Lack of interpersonal communication		
					skills	8	0.34
Oral Health	Dental caries	82	3.52	Social Interaction	Limited social interaction	13	0.56
	Injured bleeding gums	71	3.05	Health Behaviors			
	Sensitivity to hot / cold	36	1.55	Nutrition	Malnutrition	12	0.52
Neuromuscular	Difficulty walking/moving	18	0.77		Overweight	17	0.73
function	Limitation in joint opening	71	3.05		Hyperglycemia	34	1.46
Visual	Strabismus / blink / watery			Personal Care	Reluctance to do individual care		
	eyes / blurred vision	12	0.52		activities	1	0.04
Hearing	Difficulty hearing normal						
	speech tone	16	0.69				
				Total		2330	100

Table 1. Health Problems and Symptoms According to Omaha System Problem Classification Scheme of Children

According to the Problem Classification Scheme, the most common problems were determined as "Skin" 24.2% (298), "Pain" 20.7% (254), "Digestive-Hydration" 10.7% (131), "Circulation" 8.1% (100), "Oral Health" 7.0% (86), "Neuromuscular Function" 6.1% (75) and "Mental Health" 5.1% (63). A total of 2330 signs and symptoms were defined for the 17 identified problems. The most common signs and symptoms among the issues were expressing woundbruise 12.19% (284), discomfort/pain 10.86% (253), avoiding the aching area / protective movement 7.94% (185), grimacing 7.90% (184), nausea and vomiting 5.62% (131), inflammation 5.15% (120), loss of appetite 3.56% (83), dental caries 3.52% (82), and injured bleeding gums 3.05% (71) (Table 1). The symptoms associated with health problems are displayed in Table 1.

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Nursing Interventions for Children's Health Problems According to the Intervention Scheme

A total of 1230 nursing interventions were defined for 17 problems in the Omaha System. Among the 76 targets in the Omaha System Intervention Scheme, 25 targets were implemented for the issues. In addition, 17 targets were implemented for the seven most common problems, and 1007 nursing interventions were implemented for the targets. The most frequently utilized targets in the records were as follows: symptom findings/physical at 55.2% (n=556), wound care and dressing change at 18% (n=182),

medical treatment/dental treatment at 9.13% (n=92), nursing care at 4.27% (n=43), and durable medicine means at 3.17% (n=32).

Interventions for the target were applied category of Surveillance (57.4%) 578 times, interventions in the Treatment and Procedure category (26.4%) 266 times, interventions in the Case Management category (9.9%) 100 times, and interventions in the category of teaching, guidance and counseling (6.3%) 63 times (Figure 2). Categories and frequently used interventions for children's problems are shown in Figure 3. As the frequency of the intervention increases, its color darkens (Figure 3). The interventions for the three most frequently addressed problems, as illustrated in Figure 3, are detailed in Table 2 in the appendix.

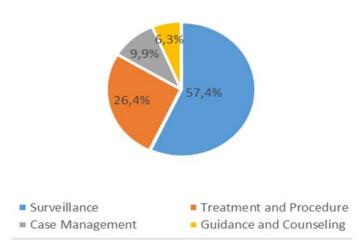


Figure 2. Interventions of Category

DISCUSSION

The American Academy of Pediatrics states that school nurses play an important role in developing children's optimum psychosocial health and well-being in the school environment.¹ Nurses need valid and reliable measurement tools in providing care services. The Omaha System improves the problem-solving process, critical thinking, and quality of care and facilitates nursing practice organization, enabling nurses to diagnose problems quickly.¹⁴ Various studies have reported that the Omaha System is reliable and useful in health assessment.^{7,8,19-21} For the children in this study, seventeen of the 42 problems in the Omaha System Problem Classification Scheme were diagnosed 1230 times. The problems were in the areas of physiological, psychosocial, and health behaviors. School nurses define the individual by their environment, but no record of any environmental area problems was found when the records were examined.

Targets	physical therapy care	signs/symptoms-physical	medical/dental care	feeding procedures	support group	durable medical equipment	coping skills	signs/symptoms-mental/emotio	nursing care	personal hygen	positioning	wound care / dressing change	skin care	move / transfer	interaction	support system	exercise
Health Problems						0		sigı				3					
PAIN																	
CIRCULATION																	
ORAL HEALTH																	
SKIN																	
MENTAL HEALTH																	
DIGESTION-HYDRATION																	
NERVOUS-MUSCLE-SKELETON FUNCTION																	
PAIN																	
CIRCULATION																	
ORAL HEALTH																	
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ORAL HEALTH																	
SKIN																	
MENTAL HEALTH																	
DIGESTION-HYDRATION																	
NERVOUS-MUSCLE-SKELETON FUNCTION																	
Surveillance (5) Teaching, Guidance and Counseling Treatments and Procedures (TP) Case Management (CM)																	

Note. Problems are shown on the y-axis, targets are shown on the x-axis. Shading indicates number of interventions (darker = more).

Figure 3. Intervention Categories and Targets According to Health Problems

The children's acute health problems were aligned with the categories and goals of the Omaha System. The most common acute problems in children were determined as "Pain, Skin, Digestion-Hydration, Circulation, Oral Health, Neuromuscular Function, Mental Health". In Turkey, apart from this study, there is only one descriptive study in school health that used only the Problem Classification Scheme,¹², and one intervention study that utilized all components of the Omaha System.⁷ In Gur et al.¹² study, the top three problems among school children were identified as "Skin, Pain, and Personal Hygiene," while in Ilgaz⁷ research the most frequently identified problems in the physiological domain were "Oral Health, Neuro-

Musculoskeletal, Nutrition," respectively. When compared with other research results using the Omaha System, it is seen that similar problems are experienced at school age.^{7,12} In the study by Lee and Park¹³, the health problems of students in the Omaha System were examined through interviews conducted with school nurses. Since the article was in Korean, it could not be fully compared with this study. In this study, although "superficial bleeding," one of the common reasons for students to visit the health unit, does not have a direct equivalent in the Omaha System, it has often been added to the symptom/signs section under "Skin" problems. Gur et al.¹² also reported experiencing similar challenges with "superficial bleeding" and "epistaxis"

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Table 2. Additional Material for Figure 3									
		0/							

Problems	n	%	Targets	n	%	Categories	n	%	Interventions	n	%
Skin	298	24.2	Wound care /dressing change	166	55.70	Surveillance	158	53.0	Recommended technique	164	55.03
			Symptom findings/physical	114	38.26	Treatments and Procedures	124	41.6	Pain assessment	38	12.75
			Nursing care	7	2.35	Teaching, Guidance, and			Vital findings	20	6.71
			Medical treatment/dental treatment	5	1.68	Counseling	9	3.0	Nursing care plan	3	1.01
			Durable medical equipment	4	1.34	Case management	7	2.4	Protective dressing	6	2.01
			Skin care	1	0.34				Cold treatment	9	3.02
			Physical therapy care	1	0.34				Planning treatment	5	1.68
									Receiving planned maintenance services	2	0.67
									Wound diameter/depth assessment	45	15.10
									Infection symptom follow-up	6	2.01
Pain	254	20.7	Symptom findings/physical	201	79.13	Surveillance	176	69.3	Pain assessment	67	26.38
			Durable medical equipment	16	6.30	Treatments and Procedures	41	16.1	Nursing care plan	2	0.79
			Nursing care	8	3.15	Case Management	20	7.9	Vital findings	45	17.72
			Medical treatment/dental treatment	17	6.69	Teaching, Guidance, and			Massage/ relaxation techniques	3	1.18
			Physical therapy care	12	4.72	Counseling	17	6.7	Planning treatment	18	7.09
									Positioning	6	2.36
									Hot/cold treatments	5	1.97
									Frequency/duration	50	19.69
									Location/location	58	22.83
Digestive –	131	10.7	Symptom findings/physical	94	71.8	Surveillance	86	65.65	The follow-up he took out	14	10.69
Hydration			Medical treatment/dental treatment	19	14.5	Treatments and Procedures	21	16.03	Nursing care plan	12	9.16
			Nursing care	6	4.6	Case Management	21	16.03	Nausea and vomiting follow-up	35	26.72
			Durable medical equipment	6	4.6	Teaching, Guidance, and			Skin color assessment	8	6.11
			Feeding procedures	4	3.1	Counseling	3	2.29	Skin turgor assessment	2	1.53
			Support system	2	1.5				General assessment	2	1.53
									Vital findings	27	20.61
									Planning treatment	17	12.98
									Receiving planned maintenance services	2	1.53
									Adequate/appropriate	4	3.05
									Disease infection indicator	3	2.29
									Family and friends support	3	2.29
									Coordination	2	1.53

in the study. Moreover, in parallel with the study results, school injuries occur in the literature as the most frequently encountered and emphasized problem by school health personnel. According to the 2015 data from the Centers for Disease Control and Prevention (CDC), the rate of children being exposed to violence at school (32.8%) and accidents (21.5%) is relatively high.²² In a study conducted in primary schools in Istanbul, Turkey, 3302 injuries due to school accidents were detected, and 48% of these injuries were mainly skin problems characterized by abrasions, cuts, bruises, and bleeding in the extremities.²³ A multinational systematic review of school-aged children found that 44.2% of participants reported pain in the past six months.²⁴ In line with the results, it is important to make environmental arrangements to prevent injuries to schoolage children, to organize educational programs for parents, children, and school staff, and to record and monitor them with an electronic system.

In the present study, the fifth most common problem detected in children was oral health, while dental caries was the most common symptom of this problem. Our study results support the findings of previous studies. In a study with children aged 5-15 years found that children with uneducated parents went to the dentist more frequently due to toothache, brushing once a day, and toothache.²⁵ In Kuter²⁶ study, the prevalence rate of dental caries in children aged six years was 86.63%.²⁶ Based on the present study results, planning intervention studies for parents and children on oral and dental health emerges as a significant result. Other research also indicates that oral health problems remain a substantial concern for children. Based on the current findings, planning intervention studies for parents and children focused on oral and dental health is crucial, as well as conducting regular screenings, recording and monitoring outcomes, and referring students with oral health issues to a dentist.

Nurses have various roles in caregiving. Figure 3 shows signs/findings for different problems such as pain, skin, circulation, and oral health were detected in children, and nursing interventions were performed 1007. The most common goals for nursing interventions were symptom findings / physical, wound care and dressing change, medical treatment / dental treatment, nursing care, and durable medicine means. These interventions were carried out using the categories of surveillance, treatment and procedure, case management and teaching, guidance and counseling. In the current study, while more than half of the students received services in the surveillance category (57.4%), the recommended signs/symptoms - physical target technique was used the most. In the other

study with the school community, students received more teaching, guidance, and counseling (58.1%); further, the planning of services was the most used intervention.⁷ The research results show that the categories of teaching, guidance, counseling, and surveillance are prominent in providing care services to school-age children. This result emphasizes the need and importance of education and surveillance services for school children. In Cosansu et al.²⁷ a study involving 30 children with acute needs in a hospital setting using the Omaha system, the most frequently used category was Treatment and Procedures, with 32.5%, leading to a reduction in frequently identified problems and improvement in care outcomes. This finding suggests that the care categories in clinical and non-clinical settings may vary according to need when caring for children.

Using the Omaha System, a nursing classification system, in different areas is extremely important to identify its deficiencies and take action.²⁸ Schools are known as places that directly contribute to behaviors that support students' health.⁸ In this respect, the school health nurse can manage the services best by using the 'Omaha System' in school health services such as student health assessment, health screenings, health education, and prevention of infectious diseases. With this system, requests and records made in schools become more visible, and time can be saved. In addition, the study's results highlight the need for electronic-based systems to provide health services in the school environment. In addition, using the Omaha system can potentially improve the quality of care by allowing retrospective review of health data.

Limitations

The Problem Rating Scale could not be used in this study because the children's acute complaints were evaluated retrospectively. The Problem Rating Scale for Outcomes is important for assessing the effectiveness of practitioner interventions, as it evaluates individuals' knowledge, behavior, and status before and after the intervention. The results are limited by the study sample.

Effective and reliable tools are needed to document evidence-based school nurse interventions in identifying and evaluating student health assessments. This study guided the evaluation of problems in the field of school health nursing and the use of electronic health records. The Omaha System matched the issues, categories, and targets related to children's acute health problems. The results should encourage the use of the Omaha System for electronic-based information. The Omaha System's application in acute pediatric care is particularly significant due to its structured approach to assessing and addressing children's immediate health needs. The system's detailed categorization and problem-target matching ensure that school nurses can provide timely and effective interventions even in acute scenarios. Moreover, the Omaha System supports ongoing surveillance, which is vital in acute care, enabling school nurses to monitor the child's condition continuously and adapt interventions as needed. This systematic and data-driven approach improves the quality of care provided in acute situations and contributes to better long-term health outcomes for children. In addition, with this system, an international common network can be provided among school health nurses, and evidence-based data can be obtained for evaluation.

The Omaha System provides the capability for detailed individual assessment. However, we have not encountered an example of its application in school health nursing. In this context, we emphasize and recommend its use by school nurses. Based on the research findings, planning intervention studies for common problems and evaluating the results of intervention studies using the Problem Assessment Scale will be useful.

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