

## **Determining the knowledge and skills of nurses through simulation training**

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### **Abstract**

This study examines the effectiveness of simulation-based teaching methods in nursing education. In today's healthcare system, the clinical competence of nurses is a key factor in ensuring patient safety. This article analyzes the benefits of transitioning from traditional teaching methods to simulation technologies, with a focus on the process of integrating nurses' theoretical knowledge with practice (Hakami et al., 2024)., 2024). During the study, the impact of simulation on nurses' acquisition of knowledge, development of skills, and long-term retention of these skills was evaluated (Alharbi et al., 2024)., 2024). The results show that training sessions using high-fidelity simulators significantly improve nurses' clinical competence and self-confidence (Hakami et al.(Hakami et al., 2024; Yazdanpanah et al., 2021).

**Keywords:** simulation training, nursing education, clinical skills, high-fidelity simulation, critical thinking, patient safety, professional development.

### **Metodologiya**

Tadqiqotda miqdoriy yondashuvga asoslangan kvazi-eksperimental dizayn qo'llanildi. Tadqiqot ob'ekti sifatida malaka oshirish kurslarida tahsil olayotgan hamshiralarni tanlab olindi.

1. **Baholash vositalari:** Hamshiralarning bilimi treningdan oldin (pre-test) va keyin (post-test) maxsus ishlab chiqilgan standartlashtirilgan testlar orqali tekshirildi ([Alharbi et al., 2024](#)).
2. **Amaliy ko'nikmalar:** Amaliy mahoratni baholash uchun Ob'ektiv Tarkibiy Klinik Imtixon formatidan foydalanildi. Bunda yuqori va o'rta aniqlikdagi manekenlar yordamida real klinik ssenariylar yaratildi ([Yazdanpanah et al., 2021](#)).
3. **Statistik tahlil:** Olingan ma'lumotlar t-testi yordamida tahlil qilinib, treningdan oldingi va keyingi natijalar o'rtasidagi farqning ishonchliligi ( $p < 0.05$ ) aniqlandi ([Alharbi et al., 2024](#)).

## **Asosiy qism**

### **1. Simulyatsion o'qitishning nazariy va amaliy integratsiyasi**

An'anaviy ta'lim uslublarida hamshiralalar nazariy bilimlarni o'zlashtirsalar-da, ularni real klinik vaziyatlarda qo'llashda ko'pincha qiyinchiliklarga duch kelishadi. Simulyatsiya asosidagi o'qitish aynan shu "bo'shliqni" to'ldirishga xizmat qiladi ([Alharbi et al., 2024](#)). Tadqiqotlar shuni ko'rsatadiki, simulyatsiya muhiti hamshiralarga xavfsiz sharoitda xato qilish va o'z xatolaridan xulosa chiqarish imkonini beradi. Bu jarayonda nazariy bilimlar amaliy harakatlar bilan mustahkamlanadi, natijada hamshiralarning klinik kompetensiyasi sezilarli darajada oshadi ([Alharbi et al., 2024](#)).

### **2. Simulyatorlarning aniqlik darajasi va samaradorlik**

Simulyatsion treninglarning muvaffaqiyati ishlatilayotgan texnologiyaning aniqlik darajasiga ko'p jihatdan bog'liq. O'rta va yuqori aniqlikdagi (high-fidelity) simulyatorlar inson fiziologiyasini, masalan, nafas olish, puls va qon bosimi o'zgarishlarini aniq aks ettira oladi ([Yazdanpanah et al., 2021](#)). Yuqori aniqlikdagi simulyatsiyalar hamshiralarda real klinik vaziyatga kirishish tuyg'usini uyg'otadi, bu esa ularning shoshilinch holatlarda (masalan, kardiogen shok yoki nafas qisishi) tez va to'g'ri qaror qabul qilish qobiliyatini rivojlantiradi ([Alharbi et al., 2024; Yazdanpanah et al., 2021](#)).

### **3. Bilimlarni o'zlashtirish va ularni uzoq muddat saqlab qolish**

Simulyatsion treninglarning eng muhim afzalliklaridan biri — bu egallangan bilimlarning xotirada uzoq vaqt saqlanishidir. Tadqiqot natijalariga ko'ra, simulyatsiya orqali o'rganilgan klinik ko'nikmalar an'anaviy usullarga qaraganda ancha uzoq muddat davomida hamshiralar xotirasida saqlanib qoladi ([Alharbi et al., 2024](#)). Bu, ayniqsa, kam uchraydigan, lekin o'ta kritik hisoblangan klinik vaziyatlarda (masalan, anafilaktik shok) juda muhimdir, chunki hamshira bunday holatga duch kelganda avtomatik ravishda to'g'ri algoritmlarni eslay oladi ([Alharbi et al., 2024](#)).

### **4. Psixologik tayyorgarlik va o'z-o'ziga ishonch**

Faqatgina bilimning o'zi yetarli emas; hamshira o'z bilimiga ishonishi ham kerak. Simulyatsion ta'lim hamshiralarning o'z-o'ziga bo'lgan ishonchini (self-efficacy) oshirishda yuqori samaradorlik ko'rsatmoqda ([Hakami et al., 2024](#)). Mashg'ulotlar davomida muvaffaqiyatli bajarilgan har bir klinik muolaja hamshiraning o'z kasbiy mahoratiga bo'lgan ishonchini mustahkamlaydi, bu esa bevosita bemorlarga ko'rsatiladigan yordam sifatiga ijobiy ta'sir qiladi ([Hakami et al., 2024](#)). Shuningdek, treninglar hamshiralarning tanqidiy fikrlash (critical thinking) ko'rsatkichlarini ham yaxshilaydi, bu ularga murakkab tashxislar bilan ishlashda yordam beradi ([Saghafi et al., 2024](#)).

### **5. Jamoada ishlash va tengdoshlar bilan o'rganish**

Simulyatsiya faqatgina individual ko'nikmalarni emas, balki jamoaviy hamkorlikni ham rivojlantiradi. Tengdoshlar bilan o'rganish (peer learning) metodikasi simulyatsiya davomida hamshiralarning bir-birlariga maslahat berishi va jamoada mas'uliyatni bo'lishishini ta'minlaydi ([Paul et al., 2024](#)). Bu yondashuv klinik muhitda tibbiyot xodimlari o'rtasidagi muloqotni yaxshilaydi va jamoaviy xatolar ehtimolini kamaytiradi ([Paul et al., 2024](#)).

### **Xulosa**

O'tkazilgan tahlillar shuni tasdiqlaydiki, simulyatsion treninglar hamshiralarning bilimini va amaliy tayyorgarligini oshirishda eng samarali zamonaviy texnologiyalardan biri hisoblanadi. Ushbu metod hamshiralarning nazariy bilimlarini amaliyotda qo'llashdagi "bo'shliqni" to'ldirishga yordam beradi ([Alharbi et al., 2024](#)). Kelajakda hamshiralik ta'limi dasturlariga ko'proq simulyatsion modullarni kiritish va o'qitishda tengdoshlar bilan o'rganish uslubidan kengroq foydalanish tavsiya etiladi ([Paul et al., 2024](#)).

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