

IMPROVING HEALTHCARE THROUGH THE SKILLS MIX OF THE WORKFORCE IZBOLJŠANJE ZDRAVSTVENEGA VARSTVA Z MEŠANICO ZNANJ IN SPRETNOSTI DELOVNE SILE

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ABSTRACT

Keywords

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The latest definition of skill mix refers to changes in tasks, skills, competencies or roles within and between healthcare professionals and healthcare workers in three areas: Task shifting, role expansion and multi-professional collaboration. There is evidence of the effectiveness of many changes in the skill mix – particularly in the areas of health promotion and disease prevention, chronic disease management and care of vulnerable populations. The implementation of skill-mix approaches begins with interprofessional education, which emphasises collaborative practice aimed at fostering working relationships between two or more health professions. The evidence for the effectiveness of many skill mix changes should not be understood as a resource-neutral intervention. Changes in skill mix have implications for the structure of labour shortages, as workload shifts or increases. In addition, education and training interventions require time and resources and therefore considerable joint effort from the stakeholders involved.

IZVLEČEK

Ključne besede

zdravstvo
delovna sila
medpoklicno
sodelovanje
preplet spretnosti
medpoklicno
izobraževanje
pomanjkanje delovne
sile

Najnovejša definicija prepleta znanj in spretnosti se nanaša na spremembe v nalogah, spretnostih, kompetencah ali vlogah znotraj in med zdravstvenimi delavci in sodelavci na treh področjih: prenos nalog, razširitev vlog in večpoklicno sodelovanje. Obstajajo dokazi o učinkovitosti številnih sprememb v okviru prepleta znanj in spretnosti – zlasti na področjih promocije zdravja in preprečevanja bolezni, obvladovanja kroničnih bolezni in oskrbe ranljivega prebivalstva. Implementacija prepleta znanj in spretnosti se začne z medpoklicnim izobraževanjem, ki poudarja prakso sodelovanja in je namenjeno spodbujanju delovnih odnosov med dvema ali več zdravstvenimi poklici. Dokazov o učinkovitosti številnih sprememb v okviru prepleta znanj in spretnosti ne bi smeli razumeti kot intervencijo, ki ne vpliva na vire. Spremembe v prepletu znanj in spretnosti imajo učinek na strukturo pomanjkanja delovne sile, saj se delovna obremenitev spreminja ali povečuje. Poleg tega posegi na področju izobraževanja in usposabljanja zahtevajo čas in vire ter zato veliko skupnega truda vključenih deležnikov.

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1 INTRODUCTION

The skill mix of the healthcare workforce is not a new topic; it has been discussed for decades (1, 2), but has gained considerable importance in the last decade due to the ever-growing shortage of healthcare professionals, the increase in chronic diseases, and the need for tailored approaches for hard-to-reach populations (3). The latest definition of skill mix refers to changes in tasks, skills, competencies or roles within and between healthcare professionals and healthcare workers. Skill mix can be divided into three types: 1) task shifting - reassignment of tasks, recognised as task shifting, from higher to lower skilled occupations (synonymous with delegation, substitution), 2) role expansion - addition of new tasks or roles that did not previously exist or were not routinely performed (synonymous with augmentation), and 3) multi-professional collaboration - introduction or modification of teamwork or changes in collaboration between at least two or more occupations (3-6).

2 EVIDENCE

Several systematic reviews and meta-analyses over the past decade have summarised a growing body of evidence for different interventions in different populations (e.g., maternal care, at-risk individuals, patients with chronic conditions, hard-to-reach communities), for different outcomes (e.g., mortality, hospitalisations, patient experience, access to services, costs), in different care settings and health systems (5, 6). The heterogeneity of the evidence illustrates the breadth of skill-mix innovation, but also poses a challenge for its interpretation and generalisation. In terms of job roles, most of the evidence relates to the nursing and pharmacy professions. In terms of skill mix typology, the most commonly implemented skill mix is task shifting (3).

Task shifting is the transfer of specific tasks to healthcare workers who did not normally perform these tasks as part of their job. It was developed in response to the shortage of qualified healthcare professionals and aims to make efficient use of human resources to improve the health of vulnerable populations and increase cost-effectiveness (7).

In Europe, there are many successful practices of task shifting from doctors to nurses (8-10), but there is a problem of inconsistency in postgraduate education and training for nurses taking over tasks from physicians. According to the guidelines of the International Council of Nurses (ICN) and the European Specialist Nurses Organisation (ESNO), a master's degree in a specific clinical area with at least 500 hours of clinical practice under the supervision of physicians and advanced practice nurses should be required (11). In two meta-analyses, Paier-Abuzahra et al. (10) found that nurse-led care led to a reduction in

mortality (with the reduction being significant in one analysis) and hospitalisations, but not in patient-relevant outcomes (such as physical functioning, quality of life, or pain); notably, the reduction in mortality was greatest for highly skilled nurses (advanced nurse practitioners), as opposed to registered nurses or nursing assistants. Wit et al (12) found in a study in the Netherlands that while skill shifting may attract more people to the nursing profession, we should also be mindful of excessive workload and the relationship with physicians. A large number of tasks may be subject to task shifting and exceed the competencies of basic nursing education at bachelor level (13). Overall, studies of task shift implementation reported that care provided by advanced nurses was associated with fewer emergency department visits, hospital admissions and costs (14). Systematic reviews of arterial hypertension (15), atrial fibrillation (16) and heart failure (17) provide evidence of the effectiveness of nurse-led clinics in improving clinical outcomes, but also show considerable variation in structure, scale, funding and contextual factors across health systems.

Pharmacy is another profession in which there is a considerable shift in tasks. As pharmacists increasingly take on a more patient-centred role and work as part of a multidisciplinary team, they are seen as key professionals in assessing and treating patients and supporting medication management, particularly in older people and patients with chronic conditions and complex polypharmacy (6). Pharmacist-led care can increase adherence, reduce medication errors and improve outcomes such as blood pressure control (18, 19); of note, pharmacist practise in immunisation, which was expanded globally during the last pandemic, was associated with an increase in vaccination rates (20).

The second typology concerns the addition of new tasks or the expansion of roles, also known as task augmentation, such as care coordination, the use of new technologies or electronic health monitoring. This typology refers to healthcare professionals expanding their role and taking on new tasks that did not previously exist or were not routinely performed. Thus, this typology refers to the expansion of an individual's and team's skills and roles (6). There is evidence of the successful implementation of expanded roles in health promotion, prevention and lifestyle intervention (e.g. smoking, nutrition, physical activity, weight management, immunisation, screening, emergency contraception), with most role expansions involving pharmacists, physiotherapists, nurses, dieticians, midwives and school nurses (3).

The third typology of skill mix involves the introduction of teamwork and collaboration for at least two professions, which directly affect the way they work together. This also concerns measures to improve cooperation and collaboration, such as the effectiveness of teamwork or

interprofessional education (5, 6). Schmutz et al. (21) conducted a meta-analysis of the skill mix in teamwork, including various contextual factors, and examined the relationship between teamwork and clinical performance in acute care. The analysis of 1,390 teams from 31 different studies showed that teams that engage in teamwork processes are 2.8 times more likely to achieve high performance than teams that do not. Teamwork is related to performance regardless of team or task characteristics. Therefore, clinicians and educators in all healthcare disciplines should strive to maintain or improve effective teamwork.

The implementation of skill-mix approaches begins with interprofessional education, which emphasises collaborative practice aimed at fostering working relationships between two or more health professions. Interprofessional education at the level of education and training is not exactly the practice of healthcare systems based on hierarchical relationships. In a meta-analysis, Guraya & Barr (22) showed a significant positive impact and effectiveness of educational interventions through interprofessional education modules in various healthcare disciplines.

The evidence for the effectiveness of many skill mix changes should not be understood as a resource-neutral intervention. Changes in skill mix have implications for the structure of labour shortages in the institutions in which they are applied, as workload shifts or increases. This may be especially challenging in systems with a critical shortage and high workload of nurses (23). In addition, education and training interventions require time and resources and therefore considerable joint effort from the stakeholders involved (24). Finally, it should be noted that the introduction of the skill mix also requires a change in the responsibilities of healthcare professionals set out in legislation, as it entails a redistribution of responsibilities among healthcare professionals, who do not always have national legal bases.

3 CONCLUSION

There is evidence of the effectiveness of many changes in the skill mix – particularly in the areas of health promotion and disease prevention, chronic disease management and care of vulnerable populations. Task shifting, role expansion and multi-professional collaboration offer an opportunity for the resilience and sustainability of health systems, but also pose challenges for context-specific adaptation and implementation. Overall, the importance of skill mix underscores how critical it is for countries to address health system reforms that prioritise workforce development and the networking of experts from different disciplines, and to redesign the division of labour, roles and responsibilities in health teams to achieve the best possible accessibility of healthcare and improve the quality of health services.

CONFLICTS OF INTEREST

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AVAILABILITY OF DATA AND MATERIALS

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