

**CAREER DEVELOPMENT AND MENTORSHIP IN HEALTHCARE: A
COLLABORATIVE APPROACH ACROSS NURSING, MEDICAL RECORDS,
PHARMACY, AND EMERGENCY MEDICINE**

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ABSTRACT

Background _ The transfer from one healthcare facility to another heightens the likelihood of drug mistakes. Various approaches have been used to enhance the process of transferring patients between different levels of care and mitigate negative medical consequences. The impact of pharmacist assistance during and after hospitalization has been extensively researched and has shown varying effects on these outcomes. **Aim of Work** – The objective is to discover the processes that lead to the effective deployment of support methods for health-care practitioners in rural and remote locations. **Methods** – This study is a comprehensive analysis and thematic synthesis of the existing research that investigates treatments aimed at providing assistance to healthcare professionals working in rural and remote areas. **Results** – This evaluation has a total of 43 studies that assessed support options for the health workforce in rural and remote areas. The treatments mostly consisted of training and education programs, with little studies of supervision and mentoring interventions. The factors contributing to successful outcomes encompassed: availability of suitable and sufficient training, expertise, and understanding for the supportive intervention; accessible and sufficient resources; active engagement of stakeholders in the design, implementation, and assessment of the program; a preliminary analysis of needs before the intervention; external assistance, organization, facilitation, and/or coordination of the program; promotion of the program; commitment from the organization; appropriate delivery method; leadership; and consistent feedback and evaluation of the program. **Conclusion** – This study has found many processes that are linked to effective support interventions for health-care practitioners in rural and remote areas via a synthesis of the literature. This study used an approach specifically designed for analyzing complex treatments, as a response to the recognized shortcomings of typical systematic reviews. This evidence synthesis will provide decision-makers at all levels a compilation of mechanisms that may aid in the creation and execution of support programs for personnel in rural and remote areas.

KEYWORDS: *Health-Care Practitioners, Mentorship, Nursing Interventions, Patient Care, Career Development, Emergency Medicine.*

INTRODUCTION

A crucial objective of health services is to provide health care that is easily accessible, fair, and efficient. Over the last decade, there have been substantial changes in the delivery and organization of rural health care.^[1] The developments have necessitated a rural health staff that is flexible and has the skills and expertise to expand service delivery options.^[2] However, rural health services face challenges in adequately supporting skilled and adaptable health practitioners due to various factors. These include: difficulties in recruiting and retaining practitioners^[3]; shortages of practitioners^[3]; heavy

clinical workloads, especially for sole practitioners^[4]; limited opportunities for formal mentoring or supervision^[4]; strained relationships with management^[4, 5]; limited access to professional development and continuing education^[4, 5]; lack of relief options for professional or service development^[4, 6]; limited career advancement opportunities; insufficient dedicated time for professional reading or study^[7]; and new graduates and sole practitioners with limited skills in service development.^[6]

Elsewhere, it has been proven that the content and educational methodologies used in continuing medical education (CME) interventions, training interventions, supervision, and mentorship have a favorable influence on the competence of the health profession.^[8-13] However, it remains unclear how and to what degree the circumstances in which these treatments are implemented influence their impact on staff, service, and even patient outcomes.

This is especially true when it comes to assisting healthcare professionals in rural and distant areas, where the ability to access, provide, and engage in suitable support opportunities is affected by the intricacies of the rural and remote setting.^[14-16] Support for practitioners in rural and isolated places is sometimes limited due to professional or geographic isolation, insufficient financial resources, and the expenses associated with travel, time away from work, and finding cover and respite. According to Cameron *et al.* (p. 6), the geographical location poses a difficulty for professional development, whereas isolation is crucial for professional progress and peer support.

Recent evidence indicates that a therapist's choice to relocate to, remain in, or depart from a rural community is influenced by the presence and accessibility of practice supports, prospects for professional development, the commitment of the organization to supporting the practitioner, and an understanding of the rural practice environment.^[17] The World Health Organisation (WHO) has recognized the need of doing more research to assess the impact of access to appropriate continuous professional development (CPD) on staff retention and, ultimately, rural health-care outcomes.^[18] The World Health Organization's strategy for enhancing the retention of rural health-care workers suggests that governments should create continuing education and professional development programs that cater to the specific needs of rural health workers. These programs should also be easily accessible from their place of residence and work, in order to promote their retention in the field.

Nevertheless, the connection between the rural and distant setting in which a support strategy is executed and the factors that either assist or impede the impact of a support strategy on personnel, services, or patient outcomes has been little investigated. The constraints of conventional systematic review methods in investigating matters in rural and remote healthcare settings have been confirmed.^[20] The purpose of this paper is to use an integrative review and thematic synthesis of the literature to identify the various support interventions reported in the literature for health-care practitioners in rural and remote areas. Additionally, it aims to determine how the success of these interventions is measured and defined, as well as the mechanisms that may contribute to their success in rural and remote contexts. An integrated review broadens the range of research types that may be

included in a review's criteria and enables the inclusion of both qualitative and quantitative data.^[21]

AIM OF WORK

In this work, we have opted to use the word "support" to incorporate many notions that might be regarded as models of professional help. Specifically, our focus was on investigating assistance in the form of oversight, guidance, career advancement, and other forms of general support (such as temporary respite, assistance from colleagues, and professional networks.^[22] These notions are seen as potentially changeable characteristics that might influence a healthcare professional's choice to remain or quit rural practice.^[23] The phrase professional support has lately been used to evaluate the effectiveness of a professional support framework that includes professional supervision, mentorship, peer group supervision, peer review, job shadowing, in-service programs, and journal clubs.^[24]

We recognize that conventional definitions of some of these categories have areas of commonality. Both supervision and mentoring may be seen as forms of professional assistance. Therefore, this evaluation intentionally covers a broad range of treatments. However, it specifically focuses on rural and distant health practitioners. Our goal is to examine the wider idea of assistance in order to find the most suitable set of mechanisms to assist healthcare professionals in rural and remote areas.

METHODS

The study includes articles that examined interventions designed to help health professionals in rural or distant areas, based on empirical evidence. The idea of support was examined with regard to support, supervision, professional growth, and mentorship. We restricted our investigation to the timeframe from 1999 to 2013 due to the emergence of technical advancements during this era, such as the internet and laptops. These advancements have created new environments for delivering support interventions to rural and distant practitioners, which we were eager to investigate.

The literature indicated four areas of support, which typically corresponded to the primary search phrases. The aforementioned included of supervisory techniques or interventions, professional support strategies, training and education initiatives, and mentoring strategies or interventions.

Supervision involves activities that mainly concentrate on implementing a supervision program or technique.

RESULTS

Training and education include treatments that involve instructing individuals in a specific skill, such as online training programs for mental health practitioners in rural and isolated areas on cognitive behavioral therapy

(CBT)^[25], continuing professional education (CPE), continuing medical education (CME), or continuing professional development (CPD).

Professional support encompasses treatments that seek to assist practitioners by fostering "connectedness" via networking and cooperation possibilities. Additionally, it encompasses tactics such as facilitating practitioners' involvement in planning to enhance working circumstances (and implementing alterations in work structures to enable practitioners to take use of support possibilities. Mentorships include interventions in which the major emphasis of the study was the implementation of a mentorship program.

Additionally, there was a compilation of research that particularly investigated the method of delivering an intervention, rather than the intervention itself. Success may be defined as the evaluation of the impact of support interventions on the outcomes of patients, personnel, and services. Support interventions that effectively improve patient, service, and/or staff outcomes were identified as successful. The most common method used to assess staff outcomes was by self-report measures, specifically by measuring self-reported improvements in knowledge, competence, ability, and/or clinical practice. Additional staff objectives encompassed: acquisition of knowledge (assessed by knowledge exams), experiences of isolation or socialization (such as establishing connections with other centers or coworkers), extent of information sharing and networking, and staff retention (intentions to depart and staff turnover).

The evaluation also assessed the programme outcomes, which included satisfaction with the programme (in terms of relevance, convenience of use, ease of access, and meeting needs), attendance and participation rates, and the degree of comfort or proficiency with technology.

The most often reported service outcomes were related to perceived enhancements in quality, safety of treatment, and elevated standards of practice. These results were often mentioned as patient outcomes as well. Additional service results included changes in the organizational culture and enhancements in the accessibility of treatment and clinic efficiency.

There was a total of four instances in which the results of patients' conditions were documented. The factors considered were staff perceptions of enhancements in client screening procedures, enhanced availability and excellence of services, decreased frequency of care transfers from rural to regional centers, improved client contentment with services, and the comprehensiveness of health information and services provided to clients.

The study examines the mechanisms that are unique to rural and distant areas and how they are connected to the results. Figure 1 depicts the cognitive diagram

showcasing the correlation between processes and consequences.

Performing a needs analysis before implementing an intervention

White et al.^[26] outlined a government-operated Continuing Medical Education (CME) program in which a yearly questionnaire was sent to all rural and remote general practitioners (GPs) to assess their educational requirements and provide them with information about the program. The authors said that having access to Continuing Medical Education (CME) enhances confidence in practicing medicine in rural and isolated places. CME significantly reduces professional isolation and increases the likelihood of General Practitioners (GPs) staying in practice.

Tumosa et al.^[27] outlined a rural education program that involves participants completing a survey to evaluate their specific educational requirements. The requirements analysis was used to subsequently develop a suitable combination of clinical, didactic, supervised, and administrative learning opportunities. Participants expressed significant levels of attainment in educational goals as a result of their involvement in the program.

Prior to intervention, conducting a needs analysis was found to be associated with several positive outcomes. These outcomes included improved service outcomes, such as enhanced access to services, improved service quality, and the establishment of more sustainable programs. Additionally, positive staff outcomes were observed, such as the perception of program appropriateness, effective utilization of staff time, increased confidence in practicing in rural and remote areas, higher program attendance rates, a positive impact on perceived clinical skills, and increased confidence in performing clinical interventions that would otherwise be challenging to support.

Engaging stakeholders actively in the process of designing, implementing, and evaluating the program

Chippis et al.^[28, 29] used an action research methodology to establish a clear definition of mentoring inside an organization and to determine the desirable attributes of a mentor. The results obtained from this iteration were transformed into surveys by a team of researchers. The data obtained from the surveys was used to create a comprehensive set of rules outlining the ideal attributes of mentors and mentees. Additionally, an assessment instrument was developed to effectively evaluate the progress and effectiveness of the mentoring relationship.

Engaging stakeholders in the design, content, implementation, and evaluation of a program was found to be associated with several positive outcomes. These include improvements in organizational culture related to supervision, a deeper understanding of the role of mentoring and supervision, increased participation in the program, a perception that the program's content and

structure were suitable and applicable, higher and consistent attendance, and enhanced program sustainability.

Outsourcing, management, assistance, and/or organization of program

Engaging in action research, particularly with the assistance of university researchers, may enhance the likelihood of achieving positive results. A study details the collaboration between university academics and a service to establish a continuing education (CE) program for physiotherapists.^[31] Scientists devised a survey to evaluate the continuing education requirements of physiotherapists. The findings subsequently guided the creation of a Continuing Education (CE) program and the instruments used to evaluate the program. All success goals, as determined and specified by stakeholders, were achieved.

The results of the programme were influenced by external support, organization, facilitation, and coordination. These factors contributed to high attendance rates and effective information sharing among colleagues.

Organizational commitment refers to the level of dedication and loyalty that individuals have towards their organization. Leadership, on the other hand, involves the ability to guide and influence others towards achieving common goals. Research has shown a positive correlation between strong organizational commitment and several benefits, including increased involvement levels, changes in corporate culture, sustainable programming, and better patient outcomes and quality of service provision. The senior management team's commitment to the newly developed supervision programme, as evidenced by their formation of a clinical supervision committee to oversee implementation and evaluation^[33, 34], resulted in a significant cultural shift in the mental health program's approach to supervision. The effective implementation of best practices in rural Kenyan hospitals was attributed to the collaborative efforts of the implementing team, hospital management, and facilitator. Their leadership and support facilitated a transformation in the organizational culture and commitment, which in turn motivated health workers and influenced their individual behaviors.^[32]

The availability of sufficient and suitable resources, particularly time, has been associated with increased success in implementing support programs and perhaps retaining workers. The implementation of fully subsidized locum-relieved training programs has resulted in significantly higher retention rates for rural medical practitioners.^[33] There have been reports of increased retention of nursing personnel in a rural hospital with the introduction of an 80/20 staffing plan.^[34] The 80/20 concept gives employees 20% of their scheduled work time as a break from directly attending to patients, allowing them to engage in diverse professional

development endeavors. Significantly, additional posts were established to compensate for the 20% decrease in clinical responsibilities.

Method of delivery, structure, and schedule

When three important factors were taken into account, namely timing (twice weekly 'chat' with monthly videoconference), mode of delivery (iChat, videoconference, and email), and format ('chat' mentoring weekly and videoconferencing where mentees take turns), there was a perception of greater success in the mentoring program.^[35] Electronic iChat conversations were seen as a way to recreate the colleague engagement that was sometimes lacking in solitary professions.

When a support program included elements such as contact, networking, and peer support, it was associated with positive results, including decreased feelings of isolation, increased participation rates, successful completion of the program, and high levels of participant satisfaction. Both face-to-face^[36-39] and non-face-to-face treatments^[40] were applicable in this scenario.

A randomized controlled trial investigated the effects of an approved online training program in cognitive-behavioral therapy (CBT) for psychologists in both rural and urban areas. The research compared the outcomes of organized online modules of study with and without guidance from a CBT expert.^[25] The group that received help throughout training had a considerably higher likelihood of completing all training modules compared to the group that did not get support. An online resource for rural health-care practitioners, which was enhanced via online, guided courses, likewise shown excellent rates of accessibility.^[41]

In cases where the method of delivery included direct interaction, the availability of financial resources and assistance (such as travel expenses, housing, pay, time off, and temporary replacement staff^[42-47]) was shown to be associated with positive results, including the long-term viability of the program and higher rates of participation. In non-face-to-face interventions, finance was crucial for providing equipment and compensating experts, instructors, mentors, and supervisors involved in the program.^[48-50]

The physical presence of the programme

Successful outcomes were observed when interventions were delivered remotely using technology. The key factors contributing to these outcomes were: flexibility in the timing of delivery, adequate preparation for the technology to function properly (including orientation to the technology and online learning approach), external support and coordination (including organizing technology and participants, as well as developing or organizing session content), user-friendly technology (including reliable connection speeds), correct and proficient use of technology, secure transmission of

patient information, and participants' willingness to engage in self-directed learning. These aspects pertain to the characteristics that contribute to success, such as the long-term viability of the program, the rate of participation, and the degree of satisfaction among participants.

The significance of addressing these factors was demonstrated by Mitchell *et al.*^[51], who found that the effectiveness and overall achievement of technologically driven interventions can be hindered by various challenges. These challenges include competition with other services for access to the equipment, equipment malfunctions, the time needed to prepare for a session, unavailability of staff due to rotating schedules, complications with local organizational procedures and approvals, the imperfect synchronization of lip movement and audio in videoconferencing sessions, and the high expenses associated with multi-site videoconferencing sessions. These processes play a crucial role in ensuring the success of an online format.

Provision of training, expertise, or information for the purpose of overseeing, instructing, or guiding others

Providing access to training, skills, or knowledge for supervision, education, training, or mentoring has been associated with the long-term viability of a program, a better attitude towards supervision or mentoring, and a greater impact on staff outcomes (such as perceived improvements in self-reported knowledge, confidence in practice, and skills). An essential component of an effective staff-led supervision program was to guarantee that all supervisors and supervisees had external training in supervision.^[33, 34]

Consistent assessment and appraisal of the program

The practice of regularly providing feedback and evaluating assistance programs has been associated with enhanced knowledge translation, increased program sustainability, and a more significant impact on staff results. The research of electronic mentorship of rural paediatric physiotherapists^[43] highlighted the significance of monitoring progress, evaluating efficacy, and making program adjustments based on feedback at certain intervals. The research showcased enhanced communication between mentors and mentees, as well as increased clinical reasoning, confidence, and knowledge translation.

Promotion of the program

The implementation of a supervisory programme, as outlined in two studies, had two main outcomes: (i) it showcased the dedication of the organization and (ii) it enhanced both the recognition and engagement with the programme.^[33, 34] Networking and supporting connections are essential for personal and professional growth. Networking and supporting relationships include several types of connections, including networking

opportunities, peer relationships, partnerships with experts and specialists, and links with the community. These factors are associated with high levels of participant satisfaction, increased attendance rates, enhanced understanding of duties, better retention of health professionals, higher quality or safety of practice, and enhanced reflective practice.

The study discovered that the length of time General Practitioners (GPs) stayed in four rural areas in Canada for more than four years was influenced by characteristics such as the community's respect for the practitioner and the level of connection and integration the practitioner felt within the community [39]. The lack of supporting social connections has been correlated with a decrease in the number of births in rural regions, mostly due to a shortage of skilled personnel available to provide maternity care. Research highlights the limited availability of birthing experiences and experienced mentors for trainee nurses, which hinders rural clients' access to maternity care.^[44]

Further investigation

Although it is crucial to enable and facilitate access to support for health-care practitioners in rural and remote areas, the success of a practitioner in accessing a support intervention was seldom measured, and the factors that either facilitated or hindered their access to support were not investigated. The attendance rates or completion rates of the intervention served as proxies. Moreover, there was a scarcity of data about the impact of supervisory interventions on various outcomes. Similarly, just four articles specifically highlighted the retention of health professionals as a topic of concern.

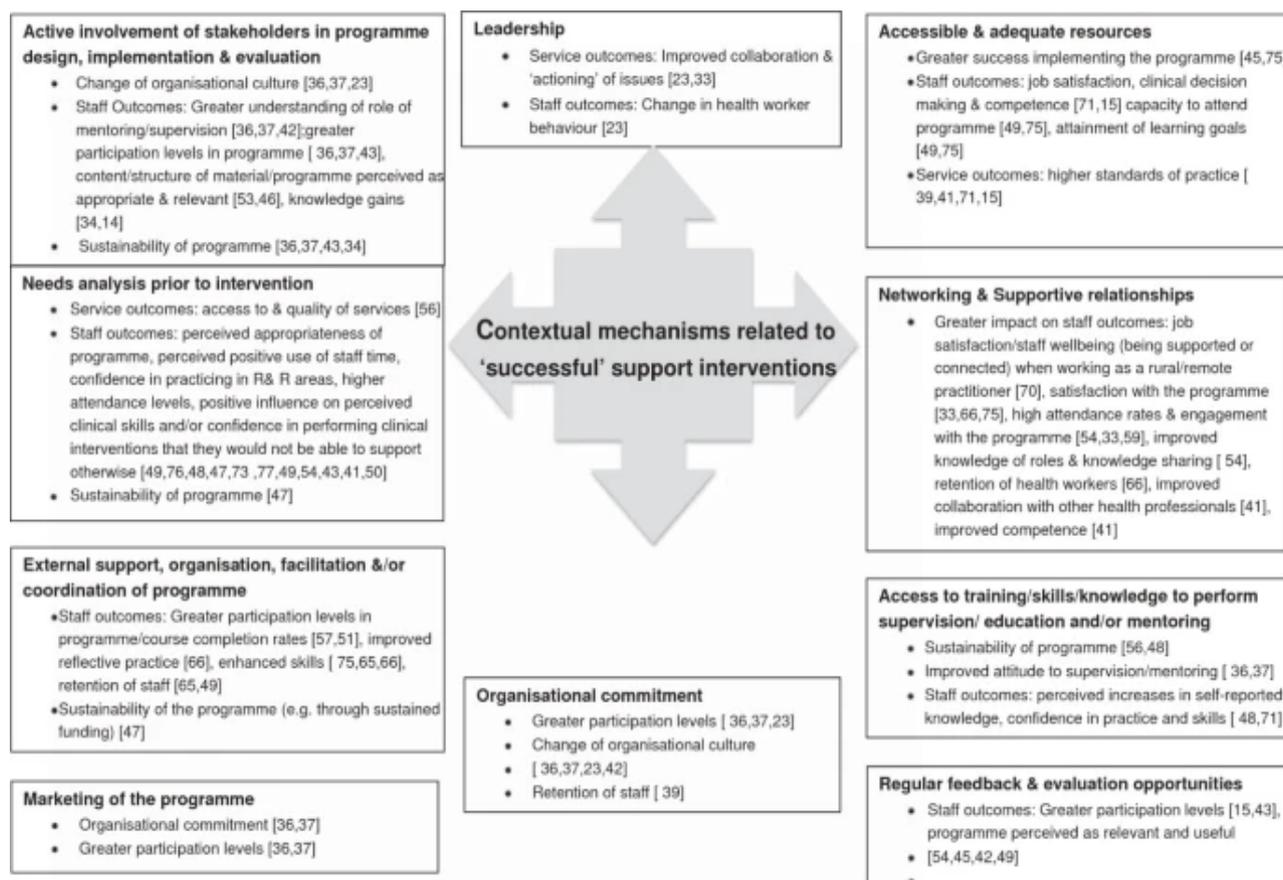


Figure 1: Displays a mind map illustrating the main processes and their correlation with results.

CONCLUSION

This study has found many crucial factors that are linked to effective support interventions for health-care practitioners in rural and remote health-care settings via a synthesis of the literature. Health-care organizations must prioritize the active facilitation of support interventions for practitioners in rural and distant areas. This review has highlighted the necessity for improved research quality, specifically in evaluating supervision interventions and retention as a result of support strategies. This will allow for more definitive conclusions to be made about the direct impact of support interventions on the well-being of rural and remote healthcare practitioners, as well as the outcomes for patients and services.

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تطوير المسيرة المهنية والإرشاد في الرعاية الصحية: نهج تعاوني عبر التمرريض، سجلات طبية، صيدلة، وطب الطوارئ

الملخص

الخلفية - يزيد الانتقال من مرفق صحي إلى آخر من احتمالية وقوع أخطاء دوائية. تم استخدام أساليب متنوعة لتعزيز عملية نقل المرضى بين مستويات الرعاية المختلفة والتخفيف من العواقب الطبية السلبية. لقد تم بحث تأثير المساعدة من الصيدلي خلال فترة الاستشفاء وبعدها بشكل شامل، وقد أظهرت هذه الأبحاث آثاراً متنوعة على هذه النتائج.

هدف العمل - الهدف هو اكتشاف العمليات التي تؤدي إلى نشر فعال لأساليب الدعم لممارسي الرعاية الصحية في المناطق الريفية والنانائية.

الطرق - هذه الدراسة هي تحليل شامل وتوليف موضوعي للأبحاث الموجودة التي تتناول العلاجات المصممة لتقديم الدعم لممارسي الرعاية الصحية العاملين في المناطق الريفية والنانائية.

النتائج - تحتوي هذه التقييم على 43 دراسة قامت بتقييم خيارات الدعم للقوى العاملة الصحية في المناطق الريفية والنانائية. وتتمثل العلاجات بشكل رئيسي في برامج التدريب والتعليم، مع وجود دراسات قليلة تتناول إشراف وتدخلات الإرشاد. كانت العوامل المساهمة في تحقيق نتائج ناجحة تتضمن: توافر تدريب مناسب وكاف، وخبرة وفهم للدعم التدخلية؛ موارد متاحة وكافية؛ مشاركة نشطة لأصحاب المصلحة في تصميم وتنفيذ وتقييم البرنامج؛ تحليل مبني للاحتياجات قبل التدخل؛ مساعدة خارجية، تنظيم، تسهيل، أو تنسيق البرنامج؛ ترويج البرنامج؛ التزام من المؤسسة؛ طريقة تسليم مناسبة؛ قيادة؛ وتقديم ملاحظات وتقييم مستمر للبرنامج.

الخاتمة - وجدت هذه الدراسة العديد من العمليات المرتبطة بالتدخلات الداعمة الفعالة لممارسي الرعاية الصحية في المناطق الريفية والنانائية من خلال توليف الأدبيات. استخدمت هذه الدراسة نهجاً مصمماً بشكل خاص لتحليل العلاجات المعقدة، استجابة للقصور المعترف به في المراجعات المنهجية التقليدية. ستوفر هذه التوليفة من الأدلة لصانعي القرار على جميع المستويات تجميعاً للأليات التي قد تساعد في إنشاء وتنفيذ البرامج الداعمة للموظفين في المناطق الريفية والنانائية.