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Interprofessional collaboration in emergency departments: The importance of teamwork among nurses, pharmacists, medical records, and physicians

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***Abstract*---**Background: Interprofessional cooperation (IPC) is becoming more often used but is done in various ways in primary care. Aim of Work – The goal of this study was to evaluate the efficacy of Interprofessional Collaboration (IPC) in primary care settings. Methods: A meta-analysis was conducted to provide a comprehensive evaluation of many systematic reviews. We conducted a comprehensive search across nine databases and used a rigorous double selection and data extraction approach. The patient-related outcomes were classified and the results were recorded as either improvement (+), deterioration (–), mixed results (?), or no change (0). Results: Overall, the use of interprofessional collaboration (IPC) in primary care was advantageous for patients, while the specific benefits varied depending on the kind of IPC used. While evaluations examining the use of interprofessional collaboration (IPC) in primary care, which has a broad range of applications, indicated improved care procedures and increased patient satisfaction, different forms of IPC yielded varied findings in terms of clinical outcomes, healthcare utilization, and patient-reported outcomes. Furthermore, evaluations that specifically examined treatments derived from established and well-defined frameworks, such as collaborative care, often indicated a greater number of advantages. Nevertheless, the presence of diversity among the original studies included impeded the ability to make comparisons and often resulted in the reporting of inconclusive findings. Ultimately, there was a paucity of reporting on professional and organizational outcomes, while cost-related outcomes showed some encouraging findings for IPC using current models. However, there was a dearth of data for other kinds of outcomes.

Conclusion: This review indicates that interprofessional cooperation has the potential to be very beneficial in primary care settings. Further focus should be given to gaining a better knowledge of the features of IPC processes, their implementation, and the identification of successful aspects.

***Keywords*---**Interprofessional, Teamwork, Primary Care, Efficacy, Summary, Examination.

Introduction

Primary care is seeing a rise in patients with complicated requirements due to the rising prevalence of chronic illnesses and aging populations. These patients need comprehensive, ongoing, and coordinated treatment from a range of healthcare specialists. As a reaction to this heavy load, primary care has suggested new care models, such as interprofessional cooperation (IPC). IPC, as defined by the World Health Organization, refers to the collaborative interaction of persons from diverse backgrounds who exhibit complementary talents **[1,2]**. This interaction leads to the development of a common knowledge that none of them had previously held or could have achieved alone. Through the improvement of communication, establishment of a shared objective, and exchange of specialized knowledge among professionals, IPC is anticipated to have a favorable influence on the coordination and continuity of treatment, ultimately leading to improved patient outcomes **[3-7]**. IPC is a difficult concept that necessitates professionals to embrace new methods of working in order to properly use provider resources and offer complete primary healthcare in a cost-efficient manner **[3]**. Several research have shown the advantages of IPC in improving patient care in various contexts, including hospitals, outpatient facilities, and community settings **[8-10].** However, other studies indicate that the data is limited or inadequate to form definitive conclusions **[11-13]**. Given the increasing interest in IPC in primary care, it is essential to have a comprehensive grasp of its efficacy, implementation procedures, and underlying mechanisms.

Aim of Work

We conducted a comprehensive analysis of systematic reviews to examine the effectiveness of IPC in the primary care setting. We also looked at the barriers and facilitators of IPC, as well as the theoretical models or conceptual frameworks associated with it. Our goal was to synthesize and summarize the results of these reviews. This report presents the findings of the efficacy of Interprofessional Collaboration (IPC) in primary care.

Methods

Overviews strive to amalgamate material from several systematic reviews in order to provide a thorough synthesis on a given issue and include a wider range of information than individual studies **[14-16]**. This method of literature synthesis has been used to handle the volume of material given in systematic reviews and is

known by many terms such as umbrella review, review of reviews, and overview of reviews **[17]**.

The predefined qualifying criteria focused on three areas. Initially, the evaluations were required to center upon IPC, which we specifically defined as a continuous collaboration and/or contact between at least two healthcare professionals from diverse backgrounds, working together to enhance the quality of care for patients, as per the criteria provided by the World Health Organization **[2]**. Two specific forms of collaboration were examined: collaboration within primary care practices or institutions, and collaboration between primary care providers (such as family physicians, general practitioners, nurse practitioners, and practice nurses) and healthcare professionals outside of primary care. Reviews that specifically examined interprofessional education, tools for evaluating interprofessional collaborative practice (IPC), or focused on a particular feature of IPC were not included in the analysis. Additionally, reviews that mainly focused on structural cooperation without considering the interactions between healthcare professionals were also removed. Furthermore, the evaluations needed to specifically focus on the primary care environment, as described by Starfield, the Institute of Medicine, and the World Health Organization **[1,2,18,19]**. In cases where the context was not explicitly stated, the IPC procedure required the involvement of a primary care practitioner at the very least. Additionally, reviews were considered eligible regardless of the type of primary studies they included, such as quantitative studies with or without meta-analysis, qualitative studies, or a combination of qualitative, quantitative, and/or mixed methods studies. Reviews that focused on conceptual frameworks, including typologies and taxonomies, were also considered eligible. Ultimately, it was necessary to carry out reviews in a methodical manner: using a thorough and clear approach in terms of search strategy, criteria for inclusion, extraction of data, evaluation of quality, and synthesis of findings **[20]**.

The search strategy was developed in collaboration with a librarian. It includes MeSH terms and keywords related to the concepts of IPC, primary care, and review. The search was conducted in nine databases: MEDLINE, EMBASE, CINAHL, PsycINFO, Cochrane Database of Systematic Reviews, Database of Abstract Reviews of Effects (DARE), JBI Database of Systematic Reviews and Implementation Reports, PROSPERO, and Epistemonikos.

Attributes of the reviews included

Out of the 34 reviews included in this summary, eight were mixed methods reviews, meaning they combined the findings of qualitative, quantitative, and/or mixed methods research. The remaining 26 reviews were quantitative reviews, with 12 of them including a meta-analysis. Based on the scope of the reviews (in terms of setting and type of healthcare professionals involved), six types of IPC were defined as follows: IPC in primary care (large scope) for reviews evaluating the effects of interprofessional primary care teams, without targeting specific professionals (in these reviews studies included two or more different professionals in the collaboration process, such as PCPs, primary care nurses, specialist physicians and allied health professionals, working within or outside

the practice) (n = 8); PCP-nurse practitioner collaboration corresponded to reviews focusing on collaboration between physicians and nurses in primary care, for example by assessing the effects of PCPs-nurse practitioners' co-management of primary care patients (n = 1); PCP-specialty care provider collaboration included reviews targeting collaboration between a PCP and a specialist (e.g. palliative care providers, oncologists, psychiatrists, cardiologists, diabetes specialist nurses) and investigated the effects of the implementation of various interventions, including face-to-face meetings/case conferences, telephone discussions, shared care records and referral guidelines (n = 5); PCP-pharmacist collaboration corresponded to reviews specifically addressing collaboration between PCP and pharmacists, such as evaluating medication review interventions or PCP-pharmacist co-location (n = 3); PCP-mental health care provider collaboration contained reviews devoted to primary mental health interventions, such as "Collaborative care" models (n = 15).

The latter typically consisted of four primary elements: a comprehensive approach to patient care involving multiple professionals (such as a primary care physician, mental health specialist, and case manager), a well-defined management plan, regular patient follow-ups, and improved inter-professional communication (through team meetings, shared medical records, etc.). The last kind of IPC was intersectoral cooperation, which included evaluations of the collaboration between various sectors, such as primary care providers and care home personnel, as well as primary care and public health.

Medical results of patients

The majority of studies included data on clinical outcomes (n = 31). Quality of life (QoL), functioning, and patient-reported outcome measures (PROMs) were provided in 20 reviews, medication outcomes in 14 reviews, procedures of care in 12 reviews, patient satisfaction in 12 reviews, and healthcare usage in 11 reviews. Furthermore, 18 studies documented intervention variables that were linked to efficacy.

Interprofessional collaboration in primary care

Out of the eight reviews **[24-31]** on IPC in primary care, five **[26-31]** presented mixed findings regarding clinical outcomes, while three [24,25,28] reported positive results. These positive results included a decrease in HbA1c levels, mean systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels, as well as a reduction in body mass index among diabetic patients who received care from an interprofessional team (i.e., when a nurse or pharmacist collaborated with the primary care physician) **[24,25]**. Additionally, there was a decrease in SBP and DBP among patients with primary hypertension who received team-based care compared to usual care [28]. Three studies indicated improvements in quality of life (QoL), functioning, and other patient-reported outcome measures (PROMs), such as enhanced self-care, lifestyle, and reduced functional decline **[24,26,28]**. On the other hand, four reviews revealed mixed findings for this specific category of outcome **[27,29-31]**. While the inclusion of practice nurses in primary care teams broadened the scope of services offered, the inclusion of a pharmacist

resulted in contradictory findings on the use of medicines in patients with chronic diseases **[31]**. One study **[31]** shown a reduction in emergency department visits, whereas four other studies **[26,27,29,30]** found varying outcomes on healthcare use. Three evaluations **[24, 30, 31]** indicated positive impacts on care procedures, such as improved access and provision of necessary testing. Additionally, five reviews **[24, 26- 28, 30]** reported increased patient satisfaction.

Two evaluations have revealed that treatments that include individual care plans likely to have more positive outcomes and larger effects compared to other collaborative models **[26,29]**. In addition, two reviews assessing the efficacy of IPC in elderly patients specifically, and one review comparing the efficacy of IPC based on the patient population, concluded that although there were some positive effects on certain clinical outcomes, patient-reported measures and care processes, the evidence for interventions targeting elderly individuals remained insufficient **[26,29,30]**. A recent review on team-based care for patients with hypertension found that when an additional team member, such as a pharmacist or nurse, had the authority to make or suggest changes to medications, there was a greater improvement in blood pressure outcomes compared to just providing support for medication adherence and information on medication and hypertension **[28]**.

Collaboration between a primary care physician and a nurse practitioner

The sole review conducted on this specific type of integrated primary care (IPC) compared the impact of PCP-nurse practitioner co-management to individual physician-led care for primary care patients. The findings revealed a significant increase in adherence to recommended care guidelines, such as discussing medication side effects, monitoring diabetic control, administering vaccinations for patients with chronic diseases, and conducting examinations, when PCP-nurse practitioner co-management was implemented. Nevertheless, the research yielded conflicting results regarding clinical outcomes, and no notable disparities were detected in the quality of life of patients **[32]**.

Collaboration between primary care providers (PCPs) and specialist care providers

The evaluations examined models that included both primary and secondary care providers in the fields of chronic care, palliative care, and psychiatry and endocrinology care **[33-37]**. A study examining the impact of interactive communication, involving timely and two-way exchange of relevant clinical information, between primary care physicians (PCPs) and specialists in psychiatry and endocrinology found that there was a notable improvement in clinical outcomes for depression and diabetes (measured by HbA1c levels). This improvement was particularly significant when interventions aimed at enhancing the quality of information exchange, such as the use of structured forms, pathways, or reports, were implemented **[37]**. A study comparing shared/integrated care to usual care for individuals with chronic diseases found that medication appropriateness and adherence for depression, as well as response to depression therapy and recovery from depression, were enhanced.

The impact on average depression scores was moderate, and there was insufficient data about the effects on other long-term health issues. A recent review examining the effectiveness of shared/integrated care provided at the primary-secondary interface for complex and chronic diseases found varied results across different outcome categories. Some studies demonstrated positive effects on clinical outcomes and healthcare utilization, such as reduced hospital admission rates and shorter length of stay. However, other studies did not observe any significant changes **[34]**. With regards to healthcare use, a single analysis on primary care physician (PCP) involvement in palliative care shown favorable results in terms of hospital utilization, including lower readmissions and shorter duration of stay **[36].** One analysis found that when general practitioners collaborated with specialists, there was consistently higher patient satisfaction and improved care procedures. However, two other reviews had conflicting findings. The evaluations indicated varying outcomes for PROMs.

Collaboration between primary care physicians (PCPs) and pharmacists

This kind of cooperation consisted of three reviews. A study examining multidisciplinary community care for patients with type 2 diabetes, which included a pharmacist and a primary care physician (PCP), found that patient outcomes improved significantly. There was a notable decrease in HbA1c levels and systolic blood pressure compared to standard treatment, and these results were both statistically and clinically significant. A different study that investigated the presence of a non-dispensing clinical pharmacist working alongside a primary care team to enhance medication use discovered that there was no correlation between the level of integration and improvements in health outcomes, except when the results were divided based on the type of pharmacy services offered. It was found that patient-centered services, such as addressing polypharmacy, had a positive association, while disease-specific services, like diabetes and chronic obstructive pulmonary disease, had a negative association **[39]**. The third review examined medication review interventions conducted by pharmacists and general practitioners (GPs) for patients living at home who are 70 years old or older. The review found a strong correlation between the level of collaboration between GPs and pharmacists during medication review and the rate at which recommendations for addressing drug-related issues were implemented **[40].**

Collaboration between primary care providers (PCPs) and mental health care providers

All 15 studies in this particular kind of IPC examined collaborative care, which refers to a multi-professional intervention comprising a GP, a mental health expert, and a case manager. These reviews also explored alternative collaboration models in primary mental health treatment. While 13 out of 15 reviews indicated notable enhancements in clinical outcomes for depression and anxiety **[41-53]**, two reviews that examined mental health overall **[54]** and psychotic disorders in older patients **[55]** reported conflicting findings regarding clinical outcomes. Interventions that included a well-established psychological therapy model **[46]**, structured supervision from the case manager **[45,47]**, or a systematic approach to identifying patients **[45,49]**, shown a considerably greater effectiveness in reducing depressed symptoms. An analysis investigating the relationship between

primary care providers (PCPs) and mental health providers/services discovered that studies with favorable clinical results often involved care management, improved communication, consultation liaison, and local protocols **[53]**.

Moreover, treatments that closely adhere to Gunn's concept of collaborative care shown greater effectiveness, as did interventions carried out by community-based organizations that include nurses as case managers **[42,43,48]**. Furthermore, the incorporation of mental health services into primary care settings shown enhancements for patients with mental health disorders or alcohol-related drug addiction in terms of the intensity of symptoms, responsiveness to treatment, and recovery, as compared to standard care **[52]**. Collaborative care shown enhancements in medication use and adherence to therapy in relation to medication outcomes **[41,42,45,46,50,55]**. Among the limited number of evaluations that assessed patient satisfaction and patient-reported outcome measures (PROMs), almost 50% of them indicated better results.

Intersectoral cooperation

This form of cooperation comprised two reviews **[56,57]**. The review examined the integration between healthcare professionals and nursing home staff. The diverse range of outcomes and interventions made it difficult to compare the results. While some improvements were noted, most of the studies included in the review found that the intervention had either mixed or no effect on clinical and medication outcomes when compared to the control group **[56].** The evaluation, which specifically examined the partnership between primary care and public health, found that there were enhancements in the treatment procedures as well as improvements in quality of life, functioning, and other patient-reported outcome measures (PROMs) **[57]**.

Healthcare professionals

There was a lack of reporting on professional and organizational results in relation to patient outcomes. Six studies examined the impact of healthcare professional outcomes, revealing heightened satisfaction among healthcare professionals **[24,31]** and improved experiences and perceptions of IPC (including enhanced communication and better knowledge of responsibilities and tasks) **[24,36,57]**. Nevertheless, an analysis found that an escalation in the proportion of non-clinical to clinical workers resulted in a decline in team atmosphere **[31]**. The professionals' acquisition of novel information and abilities and enhancement of general practitioner clinical behaviors were also documented **[24,33,34]**.

The results of the organization's performance were documented in two literature studies **[24,57]**. According to a study, IPC models were shown to provide greater use of resources, improved access to services, reduced waiting times, and more complete care compared to a uni-professional care delivery model **[24].** According to the second evaluation, the partnership between primary care and public health sectors resulted in better access to care, increased efficiency (such as faster reporting), and enhanced delivery of care procedures **[57].**

In terms of cost outcomes, all 11 evaluations provided a combination of findings and/or inadequate data to determine the cost or cost-effectiveness of IPC models in primary care **[24,26,30,33,34,35,44,52,53,55,57]**. Most assessments indicated that the economic data were few and that main research used diverse methodologies to assess costs and benefits, varying in durations and economic variables, making comparison unfeasible. Although there is variation among the primary studies, reviews that focus on collaborative care or shared care generally show more favorable cost outcomes **[35,44,52,53,54,55]**. This is particularly true when considering other measures such as quality-adjusted life years (QALYs) and depression-free days to assess cost benefits **[55].** Furthermore, a review assessing the cost-effectiveness of collaborative care for treating major depressive disorder in primary care found that while collaborative care is effective in terms of quality-adjusted life years (QALYs) and depression-free days, it generally incurs higher costs compared to usual care **[44].**

Discussion

The findings of this research indicate that there is a substantial amount of data available on the efficacy of IPC in primary care settings. The majority of the evaluations included in the study showed improvement in clinical, pharmaceutical, and process of care outcomes, as well as patient satisfaction, across the six recognized categories of IPC. This service-oriented improvement pattern shows promise and is very resilient, since it seems to be applicable to many demographics, primary care locations, and forms of integrated primary care. However, the effect of IPC on reducing healthcare use, such as rates of hospital admissions, or on enhancing quality of life, functioning, and other patient-reported outcome measures (PROMs), is uncertain due to the conflicting findings reported in most research. No deterioration in patient-related outcomes was seen for any category of outcomes.

Our findings indicate a paucity of data on healthcare use, quality of life, functioning, and other patient-reported outcome measures. There are several justifications for this phenomenon. Initially, it is more feasible to emphasize the impact of IPC on clinical, medication, and process of care outcomes rather than on healthcare use or quality of life. The latter aspects are influenced by several variables, such as patients' socio-economic position or education level **[58].** Thus, the latter cannot be regarded as immediate consequences of IPC. Furthermore, the studies often neglected to include healthcare use, quality of life (QoL), functioning, and other patient-reported outcome measures (PROMs) as primary outcomes. Indeed, a significant number of studies included in our assessment did not include data pertaining to these specific outcomes. Although clinical outcomes were often reported, they are not the most relevant factor for assessing interprofessional cooperation.

A recent study **[59]** conducted in Ontario, Canada, interviewed 283 primary healthcare providers from 14 different health professions who work in interprofessional primary healthcare teams. The study concluded that the most suitable measure for evaluating the performance of interprofessional collaboration (IPC) is patient experience. Patient health status is the next important indicator, followed by intra-agency referrals, workload measurements, and staff experiences.

Our analysis not only addressed the issue of choosing patient-related outcomes to assess, but also found that only a small number of systematic studies examined the effects of IPC on healthcare professional and organizational outcomes. Based on our findings, it seems that implementing IPC in primary care has positive effects on professional, organizational, and cost-related outcomes. However, it is important to note that the evidence supporting these benefits is limited. The research lacks sufficient consideration of professional- and organizational-related outcomes, despite the well-established association between professionals' satisfaction and patients' outcomes **[60-62].** Undoubtedly, there has been an increase in general practitioner discontent in primary care due to organizational issues such as workload and pressure **[63].** Our findings on barriers and facilitators to IPC align with the research conducted by Carron et al. in the same issue. These findings indicate that the main barriers and facilitators are primarily observed at the organizational and inter-individual levels, emphasizing their significance in promoting successful collaboration **[64-66]**.

Furthermore, it is noteworthy that the efficiency of IPC seems to differ not just across indicators, but also among different forms of cooperation. This underscores the notion that not all forms of IPC treatments have desirable outcomes. When examining the many ways in which IPC was applied across the six categories of IPC, we see a spectrum of cooperation intensity. This spectrum ranges from consultation or referral, where professionals just exchange information, to interdependent co-provision of care, which involves shared decision-making processes. While we cannot provide precise details regarding the individual treatments that provide the best results, our findings indicate that increasing the level of cooperation leads to greater improvements in patient outcomes **[26, 40, 48]**.

Reviews that used treatments grounded in established and well-defined models, such as collaborative care models, demonstrated the greatest improvements in outcomes ("+"). This might be attributed, at least in part, to the fact that these reviews were able to do meta-analyses due to the similarity in the interventions of the main studies, hence showing a favorable impact. On the other hand, reviews that simply offered a narrative synthesis because of differences in research methods across the source studies often presented conflicting outcomes. Another elucidation may be derived from the attributes of the installed models. In contrast to the other forms of IPC examined, collaborative care models included regular proactive patient follow-ups, a factor unrelated to the IPC phenomenon itself, which may have enhanced the efficacy of these treatments. Nevertheless, when evaluating intricate treatments that include several aspects interacting with each other, it is difficult to ascertain the exact effectiveness of a given component. Several investigations examining the relationship between intervention features and patient outcomes have identified several "active ingredients" of IPC, including the implementation of personalized care plans **[26,29]**. Other investigations have shown that cooperation is helpful only for select demographics, such as non-specific populations rather than old individuals, or for specific kinds of services provided, such as patient-centered pharmacy services rather than disease-specific treatments **[29,39]**.

As far as we know, this is the first comprehensive analysis of evaluations that focused on the efficacy of IPC in primary care and tried to provide a comprehensive viewpoint on the subject. Although using rigorous and cutting-edge methods, it is important to acknowledge some limits when evaluating the findings. One first constraint pertains to our approach in doing the search. Although we made an attempt to include our two core ideas (IPC and primary care) in a thorough search strategy and in the development of our eligibility criteria, it is probable that certain studies were not included since there is no widely agreed upon definition for these terms. In addition, our research yielded a limited number of studies that specifically addressed the topic of interprofessional cooperation (IPC) between primary care physicians (PCPs) and other healthcare professionals such as nurses, pharmacists, and specialized care providers. This may be partially attributed to the omission of search terms associated with the specific healthcare professionals engaged in infection prevention and control (IPC) in our search strategy. Our intention was to include a wide range of evaluations by adopting a broad approach. Furthermore, although conducting a thorough search utilizing systematic methodologies across nine reputable databases, we did not include a search for grey literature.

Furthermore, due to variations in the amount of information available and the diversity of treatments, designs, and settings, the process of homogenizing and synthesizing data was difficult. This is because the overview relied on the review authors' interpretation and reporting of the main studies' findings. Therefore, we opted against comparing studies and instead chose to describe trends in patient-related outcomes for each study individually. Furthermore, we encountered a prevalent obstacle in conducting a comprehensive analysis of reviews: the issue of overlap and scope mismatch **[22]**. Although there was only a small amount of overlap across the 34 reviews, several main studies were included in many evaluations, potentially causing certain research findings to be overrepresented. Furthermore, the six categories of IPC we discovered were not completely separate from one other since there was some overlap in the areas covered by the evaluations included. Lastly, the last constraint pertains to the overall caliber of the systematic reviews included, which was of moderate level. Nevertheless, this should not exclude the display of general patterns of outcomes.

Conclusion

Our analysis indicates that, on the whole, interprofessional cooperation in the primary care context may provide advantages for patients. Nevertheless, interventions that include Interprofessional Collaboration (IPC) are intricate and varied, indicating that the assessment of IPC's efficacy in primary care should consider specific aspects related to the intervention. Future research should acknowledge the diversity within interprofessional collaboration (IPC) and strive to identify the essential traits of IPC that are effective in specific situations. Additionally, it should identify the shared elements that contribute to the success of IPC across various forms, contexts, and populations, particularly in terms of outcomes that are important to patients. Due to the intricate nature of IPC, it is important to have a deeper knowledge of the specific features of IPC processes in various practical and organizational settings. Additionally, it is worth exploring the most efficient aspects of IPC and how they are interconnected. This requires

additional investigation and consideration. Specifically, the use of realism evaluation, which offers a comprehensive comprehension of effective strategies, target populations, and contextual factors, might be very suitable in this situation. Additional research is needed to examine the effects connected to cost, organizational factors, and professional factors.

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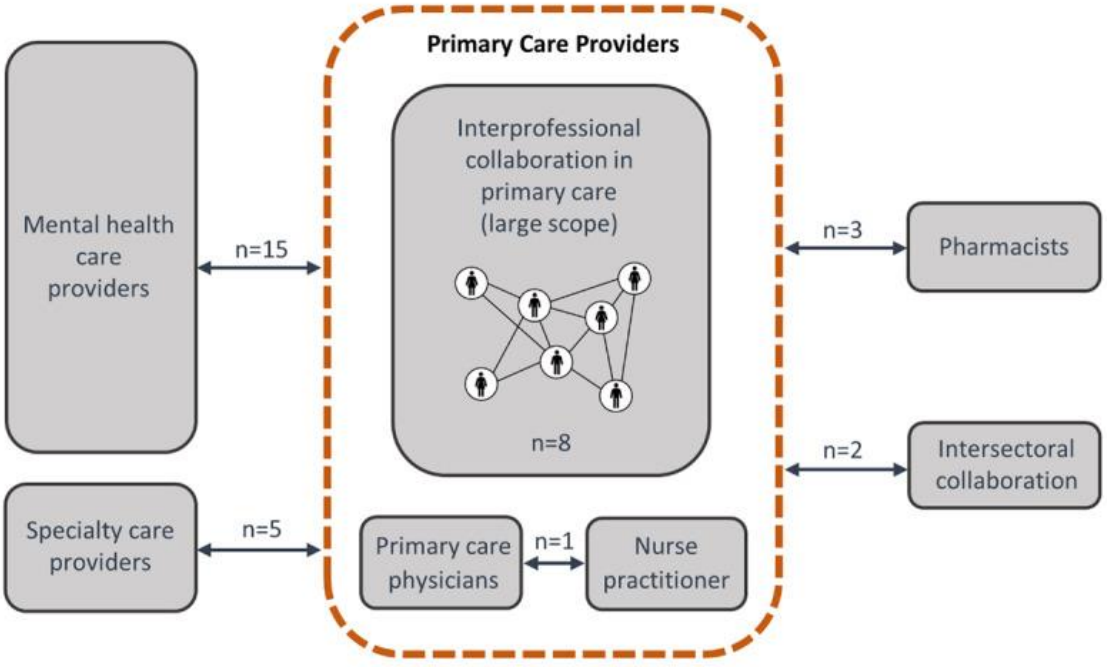

Figure 1. The identification of six distinct forms of interprofessional cooperation.

التعاون بين المهن المختلفة في أقسام الطوارئ: أهمية العمل الجماعي بين الممرضات والصيادلة والسجلات الطبية والأطباء

الملخص

الخلفية - أصبحت التعاون بين المهنيين (IPC) يُستخدم بشكل متزايد، ولكن يتم تطبيقه بطرق مختلفة في الرعاية الأولية.

هدف العمل - كان الهدف من هذه الدراسة هو تقييم فعالية التعاون بين المهنيين (IPC) في إعدادات الرعاية الأولية.

الطرق - تم إجراء تحليل تلوي لتقديم تقييم شامل للعديد من المراجعات المنهجية. قمنا بإجراء بحث شامل عبر تسعة قواعد بيانات واستخدمنا نهج اختيار مزدوج صارم واستخراج البيانات. تم تصنيف النتائج المتعلقة بالمرضى وتم تسجيل النتائج إما كتحسن (+) أو تدهور (–) أو نتائج مختلطة (?) أو عدم تغيير.(0)

النتائج - بشكل عام، كان لاستخدام التعاون بين المهنيين (IPC) في الرعاية الأولية فوائد للمرضى، بينما اختلفت الفوائد المحددة اعتمادًا على نوع IPC المستخدم. في حين أن التقييمات التي تفحص استخدام التعاون بين المهنيين (IPC) في الرعاية الأولية، والتي لها نطاق واسع من التطبيقات، أشارت إلى تحسين إجراءات الرعاية وزيادة رضا المرضى، فإن الأشكال المختلفة من IPC أسفرت عن نتائج متباينة من حيث النتائج السريرية، واستخدام الرعاية الصحية، والنتائج المبلغ عنها من قبل المرضى. علاوة على ذلك، أظهرت التقييمات التي فحصت بشكل خاص العلاجات المستمدة من أطر محددة ومعروفة جيدًا، مثل الرعاية التعاونية، غالبًا عددًا أكبر من المزايا. ومع ذلك، فإن وجود تنوع بين الدراسات الأصلية المضمنة أعاق القدرة على إجراء مقارنات وغالبًا ما أدى إلى الإبلاغ عن نتائج غير حاسمة. في النهاية، كانت هناك ندرة في التقارير حول النتائج المهنية والتنظيمية، بينما أظهرت النتائج المتعلقة بالتكاليف بعض النتائج المشجعة لـ IPC باستخدام النماذج الحالية. ومع ذلك، كانت هناك نقص في البيانات المتعلقة بأنواع أخرى من النتائج.

الخلاصة - تشير هذه المراجعة إلى أن التعاون بين المهنيين لديه القدرة على أن يكون مفيدًا جدًا في إعدادات الرعاية الأولية. ، وتنفيذها، وتحديد الجوانب الناجحة.IPCيجب أن يُعطى مزيد من التركيز لفهم أفضل لخصائص عمليات