REVIEW



Transition to practice in pharmacy: An ill-defined concept?

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Abstract

Commonly described as the passage from school to practice, transition to practice, as a concept, as yet to be explored in-depth, is clearly circumscribed and conceptualised to better address the issues experienced by new health professionals when they begin their professional practice. This study intends to describe how the process of transition to practice is represented and studied within various health disciplines, particularly in pharmacy. A scoping review design was chosen to sort out a corpus of published papers on the transition to practice. The primary objectives of this review are to clarify the key concepts related to the transition to practice in health disciplines, detect gaps in the current knowledge, particularly in pharmacy, and identify relevant lines of inquiry that would provide a better understanding of this critical and vital process.

Introduction

Commonly described as the passage from school to practice, transition to practice for health professionals has been studied from multiple angles to address various concerns (Schipper, 2011; Mitchell, 2017; Moores & Fitzgerald, 2017; Speight *et al.*, 2019). "Readiness to practice", enabling interventions, and key challenges are the most frequent focal points of the literature. Except for a few definitions, transition to practice as a concept as yet to be addressed in-depth is clearly circumscribed and conceptualised to better address the issues experienced by new health professionals when they begin their professional practice. A better understanding of this concept and its challenges becomes essential for pharmacists as their scope of practice is rapidly evolving in the context of overwhelmed health systems.

Transition to practice differs from entry to practice or practice readiness in that it evokes a process, whereas the others suggest either a definite moment in time (the moment of entry) or a state (being ready to practice). The passage from school to practice raises specific challenges. Questions such as what transition to practice implies, when does it begin or end, how can transition to practice be enhanced, become, in turn, relevant in all health disciplines and domains, notably in pharmacy.

This study intends to describe how the process of transition to practice, important to one's emancipation from a supervised to a self-regulated practice, is represented and studied within various health disciplines, particularly in pharmacy. A scoping review design was chosen to sort out a corpus of published papers on the transition to practice. The primary objectives of this review are to clarify the key concepts related to the transition to practice, make sense of the available literature and evidence on the transition to practice in health disciplines, detect gaps in the current knowledge, particularly in pharmacy, and identify relevant lines of inquiry that would provide a better understanding of this critical and vital process.

Methods

A scoping review was performed to explore key concepts

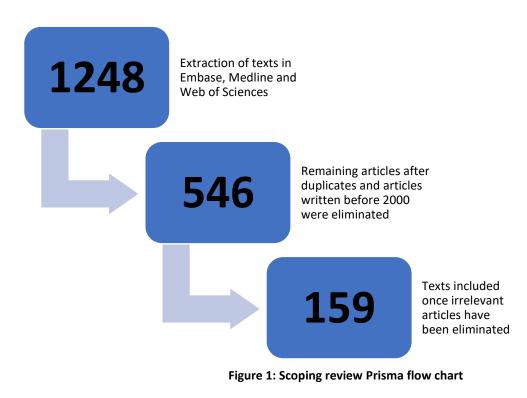
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and definitions and identify knowledge gaps, using three levels: A1 transition to practice, B1 pharmacy, and B2 health care. The objective of this scoping review was that the intersection of A1+B1 would highlight relevant literature addressing transition to practice in the field of pharmacy and that literature common to A1+B2 would allow for analysis of the transition to practice phenomenon in other health science disciplines.

The query was run successively in Medline, Embase, and Web of Sciences to cover thoroughly pharmacy and the

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pharmaceutical sciences, health sciences, and social and behavioural sciences domains. The search was limited to articles published in North America or literature reviews published in renowned international journals. Duplicates and conference proceedings were removed from the 1323 manuscripts identified. Titles, dates and abstracts were then reviewed by the research team to sort and screen the remaining papers and remove all the ones published before the year 2000 or not directly addressing the transition to practice of health professionals (Figure 1).



Afterwards, the research team analysed a test sample of 20 articles selected randomly from the remaining 159 texts to identify recurring categories and themes. These categories and themes were used to classify all the remaining 159 texts based on an abstract review. The categories and themes identified were the type of paper, domain, key issues and concerns, the moment in the process of transition, perspective, and methodology. To conclude, 39 texts were selected to be thoroughly read for their in-depth reflection on the transition to practice. Consequently, a lack of a clear definition of transition to practice has emerged, and some key research focuses and concerns have been described.

Results

Transition: a seldom defined concept

Before describing our results, it is noteworthy that very few of the 159 papers identified in the scoping review offer a theory-based definition or an in-depth reflection on the transition to practice, apart from some exceptions. Magola and colleagues (2018) describe the transition as a dynamic process of social integration into the workplace environment that triggers a period of intense learning and numerous changes for an inexperienced practitioner. It is the period when new practitioners make their first independent decisions and become accountable for those decisions. According to the authors, this period that could last up to three years is indeed challenging while having a significant impact on retention, professional development, and patient care. For Gregory and Austin (2014), the learning occurring during this period refers primarily to acquiring tacit knowledge from colleagues who share the same work environment and internalising the roles and codes of one's profession. Dwyer and Hunter (2016) are the authors who pushed the analysis the furthest by proposing a theoretical model of transition. In their model, the transition is portrayed as a socioecological process during which the professional must deal with competing intrapersonal, interpersonal, and organisational dynamics from within the workplace environment.

For Moores and Fitzgerald (2017), learning during transition is difficult. It requires the practitioner to adapt to a complex work environment and develop safe practices while being disturbed by a lot of demands from and by unmet expectations towards the workplace environment. Mitchell (2017) reported that transition and its challenges expose professionals to the uncertainty of success and the crude possibility of failure.

All being considered, different definitions lead to different perspectives. For instance, several authors studied the transition to practice through the lens of "practice readiness". From this perspective, the transition to practice is looked at as a passage filled with potential pitfalls. Also, training interventions aiming to increase the level of preparedness of new practitioners are put forward as solutions to a better transition (Mirza et al., 2019). Training programmes, coaching activities, scholarship programmes (Mirza et al., 2019), webinars, mentorship, experiential learning, training, interprofessional professionalisation, socialisation (Speight et al., 2019), and reflective activities (Mitchell K., 2017) have been proposed and explored. For example, Cameron and colleagues (2014) focus their research on skills that new physicians seem to lack to be practice-ready, such as prescribing, managing stress, teamwork.

From a different standpoint, other rare authors are interested in the experiences lived by new graduates during this transition period. For Magola and collaborators (2018), transition to practice brings its share of cognitive, emotional, physical, and social challenges (personal and work-related) impairing overall practitioner's performances and learning and caring capacities. Like most authors, Gregory and Austin (2014) consider that employment conditions are essential factors for a successful transition into the workplace environment. Finally, Kennedy and colleagues (2015) focus on the emotional discomfort and responses triggered by perceived discrepancies between what new practitioners have learned and what they must perform efficiently in practice.

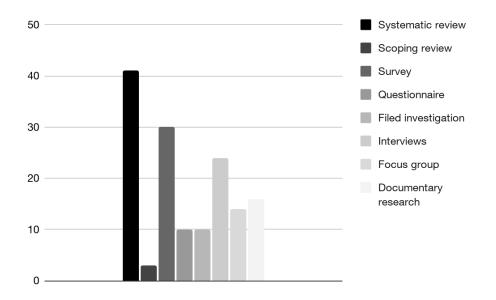
Those are the few elements found in the literature to help define the transition, which leaves 150 articles lacking a proper definition of the concept. Those articles were included in this literature review, and the next section focuses on analysing this corpus.

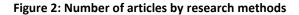
General Corpus description

Papers were classified based on various criteria, their methodology firstly. The majority of the literature reviews were announced by the authors as systematic reviews. Research papers were also sorted more specifically by their methods displayed for collecting data. The sorting categories were as follows: surveys referring to a wide-ranging of distant self-completed questionnaire; questionnaires indicating the use of open-ended or closed-ended guestions completed by or in the presence of the researcher; field surveys with questionnaires requiring the presence of the researcher and involving minimal observations; interviews of various lengths; focus groups; document and content analysis involving searching, gathering, and analysing organisational policies, course descriptions, and professional association statements.

Surveys were the most popular methods, followed by interview-based methods and document and content analysis. The tendency to study the transition to practice from the perspective of training interventions may explain to some extent the popularity of such methods. These methods are convenient and efficient for reviewing academic and curricular documents and evaluating specific training programmes for their goals and objectives (Figure 2).

Papers were categorised by domains to get a better idea of how the transition to practice was examined and in which domains it has been explored more thoroughly. This scoping review revealed that, at this time, the transition to practice is of most concern for nursing (71%) and less for other professional domains. Pharmacy stands in second place with 12.5%. The explanation for the latter result could be that pharmacy is at the core of this scoping review and the sensitivity of the databases queried to the pharmacy domain. Finally, the "Health Professional" category (6.9%) regroups all multidisciplinary research as well as the remaining domains with a limited number of texts identified (Figure 3).





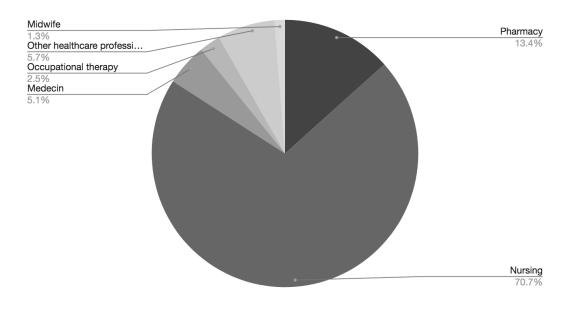


Figure 3: Prevalence rate of texts identified by domains

Papers perspectives on transition

Transition moment of interest

When does the transition to practice begin, and when does it end? The answer to this question remains unclear. According to this review, researchers have situated the problem at different moments in time. Indeed, some researchers have positioned the problem upstream, focusing on a so-called pre-transition period, i.e., the academic curriculum (upstream). Those articles represent 30% of the research papers. Other authors (in 42% of the papers) focus specifically on the workplace environment, its issues and challenges (downstream). Finally, some papers (28%) address the transition more broadly, looking at it from both ends, upstream and downstream.

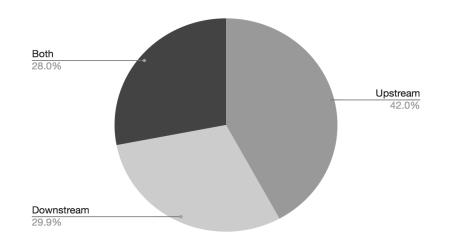


Figure 4: Prevalence rate of articles classified by transition moment of interest

Actors perspective considered

A range of perspectives has been explored from the stance of various actors in the transition process: the transitioning professionals, workplace staff and colleagues, supervisor, programme director or programme development team, etc. The point of view of new practitioners experiencing transition-related

challenges is well represented in the research papers (43.3%). Those texts also provide insight into the academic, including schools or trainers (26.8%) or the organisational point of view (17.2%). Finally, some authors try to understand the transition challenges from a systemic perspective (12.7%), referring to various actors' perspectives.

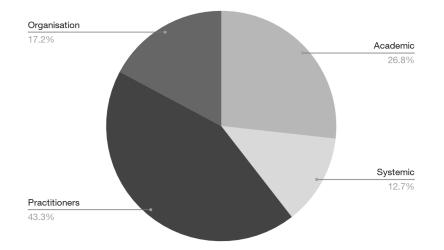
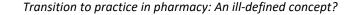


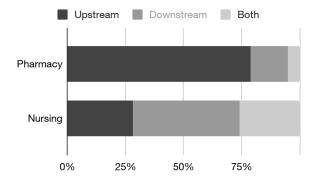
Figure 5: Prevalence rate of articles classified by studied perspectives

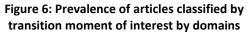
Moment of interest and perspectives by domains

According to this scoping review, pharmacy has, to date, shown lesser interest in the concept of transition to practice than nursing. But are there notable differences between nursing and pharmacy concerning the moment of interest and perspectives studied by each domain? Data were cross-examined to compare pharmacy and nursing on that matter.

Nursing tends to locate transition-related issues mainly downstream by looking at workplace-related issues or through workplace designed interventions (\approx 50% of papers in nursing sciences). Additionally, nursing has shown interest in the transitioning professional perspective (close to 50%) and, to a lesser extent, to academic-related issues and interventions (slightly over 25%).







Moreover, pharmacy texts are more concerned with upstream academic issues and focus mainly on curriculum-based interventions (75%). Pharmacy has shown limited interest in the professional in transition perspective (\approx 20%), downstream workplace issues (25%), and multiple-actors perspective (\approx 30%).

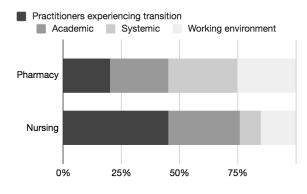


Figure 7: Prevalence of articles classified by perspectives by domains

Key concerns

Concerns description

This review also raised questions about the key concerns motivating transition to practice research. Papers were sorted within seven broad categories, i.e., education and training programmes, competencies and skills, experiences and beliefs, employment, practice environment, professional well-being, and safety and ethics.

• Education and training programmes

Papers concerned with education and training were those exploring undergraduate curricula and other academic training activities, in addition to other forms of postgraduate education and training, such as residency programmes. Some articles also explored the forms of support put in place internally or externally, officially or not, such as mentoring programmes.

• Competencies and skills

Texts related to the competencies and skills of new graduates entering practice refer to themes such as "practice readiness" and "theory-practice gap", or specific skills considered to be missing among professionals in transition and the interventions that can foster their development.

• Experiences and beliefs

Articles concerned with experiences and perceptions were those about the experience of professionals involved in the transition to practice (new graduates and employees who integrate them). This category also encompassed articles discussing the difficulties encountered during the transition, perceived supportive or disruptive factors related to transition, self-efficacy beliefs, and satisfaction towards transition-enabling programmes or interventions.

Employment

Articles related to employability included those about the labour market, its needs and its expectations towards professionals. Those articles addressed issues such as employee attraction, retention, or shortage, as well as new graduates' expectations towards employment conditions.

• Practice environment

Articles concerned with the practice environment were those examining the context in which new graduates enter practice and their work environment during the transition. This category includes issues such as workplace incivility or bullying or organisational practices and policies that could hinder or enable transition (e.g. collaborative or empowerment practice).

Professional well-being

Papers related to either work satisfaction or mental health issues such as professional stress, anxiety, or burnout were included in the professional wellbeing category.

Safety and ethics

Lastly, articles about public safety, drug prescribing, dispensing, or ethical issues were classified under safety and ethics.

Quantitative analysis of articles' concerns

Most of the articles were concerned with questions of education and training (39%). Competencies and skills came second in importance (33%), followed by

Experiences and beliefs (30%) and Employment 25%. The last three domains were Practice environment

(15%), Professional well-being (10%), and Safety and ethics (4%) (Figure 8).

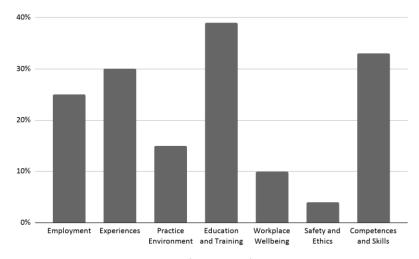


Figure 8: Prevalence of concerns found in the articles

Often papers fall under two or more categories. For example, Education and training papers addressed issues related to Competencies and skills (19 papers) or Employment (14 papers). Such pairings aimed to assess the effect of training programmes on the practice readiness of new professionals or the improvement of retention and turnover costs. Another example is the pairing of Experiences and beliefs and Competencies and skills (12 articles), tackling the perception, either self-reported or assessed by the attending staff, of health professionals' skills.

Key concerns by domains

Interestingly, the prevalence of concerns changed when articles were classified by domain. Thus, distinctions in concerns are observed between the various domains. Pharmacy-related papers seemed to focus primarily on Competencies and skills and education and training. In contrast, other domains, such as nursing and medicine, appear to have a broader and more balanced range of interests or concerns when studying the transition to practice. Even though categories such as Education and training, Experiences and beliefs, and Employment stand out in nursing, or Competencies and skills in medicine, papers in these domains were spread in all seven categories (Figure 9).

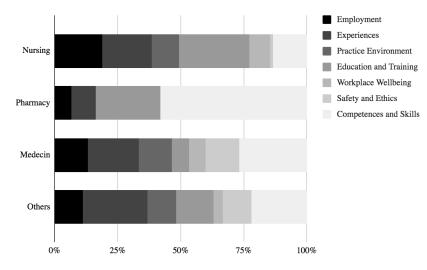


Figure 9: Prevalence of Concerns classified by Domains

Discussion

Transition to practice in pharmacy: an ill-defined concept

This scoping review included articles from different healthcare domains. However, particular attention has been paid to papers from the pharmacy domain. Notably, the results of this study suggest that the pharmacy domain has shown lesser interest in the concept of transition to practice when compared to other domains such as nursing. Conversely, transition concerns, challenges, and interventions in pharmacy appeared to be more education-centred. Indeed, more than three-quarters of all texts had the curriculum and its effect as the main focal point. Also, authors seemed less interested in the practitioner in transition perspective as they gave greater importance to the academic, stakeholder, and employers point of view when looking into transition to practice issues. Furthermore, the pharmacy domain showed limited to no interest in new graduates' workplace experiences and well-being.

In this respect, the transition in pharmacy is mainly studied as a utility concept, i.e. judging the quality of education by the employability and the costeffectiveness of incoming professionals/workers. This utilitarian approach falsely correlates the process of transition with the state of readiness as defined by the employers' criteria.

This confusion can be fueled by the lack of definition of the concept "transition to practice". Nevertheless, the absence of a clear definition or a lack of consensus on any definition does not indicate a paucity of literature on the matter. To most authors, the concept seems to speak for itself. Nevertheless, this review shows that the concept does not rest on homogeneous representations of reality. For some, the transition is a challenging, unpleasant, yet essential and inevitable moment that must confront newly graduated professionals. A difficult time that sufficient training and competency development would ease. For others, the transition is a long and stressful process that could be facilitated by team support and effective collaboration. Moreover, the transition is often looked at from a specific perspective or a specific moment of the process. Most authors chose to explore upstream in the academic setting or downstream in the workplace environment, but they rarely looked at the transition to practice as a whole non-divisible process. Oddly enough, papers on the transition to practice rarely reported or studied the entire trajectory, from start to end, of becoming professionals.

Undoubtedly, the transition should not be seen as a state that future professionals must reach. It should be

studied as a complex, multifaceted process involving multiple actors and should not be simplified to one moment in time, affecting solely one actor neither to one specific intervention that would miraculously make it better. Thus, the utilitarian vision of the transition shown in pharmacy articles raises questions and debates on the practice readiness of pharmacists and the competencies they should achieve before entering the workforce.

Tensions between education and workplace in the domain of pharmacy

For two decades, a change of paradigm has been observed in the healthcare system. The focus is being predominantly directed toward patient-centred care, improving population health, access to services, illness prevention, cost reductions, and provider satisfaction (Carrington et al., 2018). However, obstacles such as the shortage of healthcare providers have hindered and disrupted this shift, making it difficult for the workforce to change, implement, sustain, and improve. Widening the scope of practice of professionals to allow nurse practitioners and pharmacists to perform and share new professional activities, for example, was one solution put forward to improve access to care and cost reduction. In the past decades, widening the scope of pharmacy practice has led to major curricular reforms rather than workplace reengineering. These curricular reforms were aimed to develop competencies and improve practice readiness to embrace new professional roles in leading expected practice change. Unfortunately, resistance and debates over the suitability of this caring paradigm in the community practice setting have impaired the implementation of more progressive practice models. A state of affairs that seems to leave curricular reforms as the sole option available to improve the transition to practice.

Transition wise, this raises the issue of successful transition and the criteria to evaluate it (Gruenberg et al., 2021). The academic community tends to approach transition in a broader way, including notions like work culture, organisational language, work relationship, patient care, among others. Once entering the workplace, new practitioners face challenges as they are exposed to the organisational culture, which could be resistant to change and not fully embrace the caring paradigm, at least not at the expected level. Moreover, the workplace stakeholders tend to confuse transition to practice with readiness to practice, claiming that on this matter, their expectations towards the efficiency of pharmacists in managing their practice, time, and available resources have not been met and should be dealt with upstream (solely as an education issue). Thus, by seeking to reconcile these two points of view,

one should not question only the adaptability and readiness of future pharmacists but also the adaptability and readiness of the workplace to change toward the caring paradigm, which would imply recognising and enabling initiatives, leadership, critical thinking, and creativity displayed by new pharmacists, who become more autonomous healthcare professionals, empowered to implement change.

In addition to the criteria of a successful transition, there is also the moment in time where the evaluation of such a transition takes place. For most, the current way of thinking in the practice community is that transition should end, more or less, at day one of entering the practice, meaning that the curriculum must be efficient to make professionals practice-ready at day one. In this way of thinking, educational programmes and professionals are solely accountable for the state of preparedness and the success of the transition to practice, leaving the workplace environment and professional bodies withdrawing their responsibilities and denying any accountability for the effectiveness and success in the transition of professionals they welcome. But what about the needs and support for the transitioning professional? And in fact, what characterises a proper and efficient transition? In perpetuating such an imputability model, stakeholders deny the spirit of their professional oath avoiding in conscientiously supporting new professionals in providing quality care, leading practice changes, and maintaining their own well-being.

This raises the question of why show concerns about the transition to practice. This scoping review revealed that the workplace environment seems to view the transition mainly through a financial and efficacy lens, looking at turnover costs and return on investment (efficiency of the process, reduction of mistakes, implementation of new services, etc.). The primary concern for academic institutions toward the transition to practice is to demonstrate to stakeholders the efficiency of the curriculum in training ready to practice professionals. The results of this study also showed that although the workplace environment, academic institutions, and professional bodies hold high expectations toward professionals, their accountability level toward leading concerted interventions remains limited, with each party sticking to their positions and paying limited attention to the respective concerns, needs of new professionals, and the social benefits that would arouse from such concertation.

A more comprehensive definition of the transition to practice, putting young professionals and social needs at the centre and requiring concerted actions, would greatly benefit the profession, the professional, institutions, and society.

Studying transition as a process is a good way to reframe accountability

Key elements emerged from this scoping review to define the transition to practice. At first, it is clear that the transition to practice should not be reduced to or confused with competency or readiness. Secondly, the transition to practice requires global accountability and should not be limited to one's challenges or perspectives (i.e. the employer). Thirdly, the transition to practice takes time. It is a long-term process starting in the academic setting where the future practitioner starts building its professional identity and ending in the workplace environment when effective integration is achieved. Fourthly, the transition to practice is expected to unfold in stages, with successes, difficulties, and failures scattered throughout practice experiences, forging the professional's sense of competence, autonomy, and relatedness. Fifthly, the transition to practice is an adaptive process involving multiple actors to adjust. Challenges are different from one professional to another. Thus, the focus should be put on the needs and experiences of the transitioning professional then interventions should be personalised and customised to their own needs. Finally, the transition to practice is an interactive process in which interactions are significant. Therefore, it should consider the relational dimensions of practice. These elements imply new avenues for research.

To better accompany newly graduated pharmacists in their transition into practice, the entire length of their experiences and trajectories must be considered, in addition to several factors when taking actions to practice. support new professionals entering Considering upstream, for example, students may need to work to make ends meet or to gain experiences impacting learning or studies' engagement. By looking downstream, the culture of workplace environments, operations, and workflow may hinder the capacity to support incoming professionals. Therefore, it is vital to look at experiences, similarities, or differences, to understand better the plurality of transition within the pharmacy practice.

Furthermore, including professional and practice environments issues into the transition equation takes the pressure off the new practitioner and prevents them from being constantly judged. It provides ground to look at the transition to practice systemically, with shared accountability that enables new tools and approaches to support professionals through this long and stressful process. The wide range of needs in the transition to practice requires a complete toolbox engaging all stakeholders. Indeed, taking a deep look into the transition experience of new practitioners should be seriously considered as they are the ones who see all of the processes through.

Conclusion

This scoping review could shed light on a vision that obscures the transition to practice experience of the young pharmacists. In the current state of affairs, the focus is being put mainly on education interventions to lead to practice readiness on day one. To date, research in transition to practice has followed utilitarian objectives taking into account stakeholders' needs in lowering the cost of employment or providing evidence of educational programs' efficiency.

Reframing the transition to practice as a process and putting the experience of transitioning pharmacists at the core of research would provide a better understanding of all obstacles and transition stages. It would also help mobilise and sensitise stakeholders to their responsibility in supporting the transition to practice and set the table for joint interventions to improve personal, professional, and social outcomes.

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