## IMPORTANCE OF EVIDENCE-BASED PRACTICE IN NURSE'S WORK PROCESSES

Mitzy Tannia Reichembach Danski\*
Gabriella Lemes Rodrigues de Oliveira\*\*
Edivane Pedrolo\*\*\*
Jolline Lind\*\*\*\*
Derdried Athanasio Johann\*\*\*\*\*

#### **ABSTRACT**

Currently, conduct and practices must support health on the best evidence available, subject emphasized in several countries. The purpose of this article is to reflect evidence-based practice in nursing work process. It is theoretical study-reflective, based on scientific literature and critical analysis of authors. Evidence-based practice arises as a movement to use judicious results of scientific research in clinical decision-making. The main challenge for evidence-based care is your implementation, because translating knowledge into action is complex process. That puts us ahead of the challenge the performance of health care professionals in the transformation and adaptation of your clinical practice. It is a fact that the last few decades have marked by an increase in the production of national scientific research to support evidence-based practice; however, the gap between research and practice still prevails. We must educate the professionals, managers, and especially users and patients about the importance of tackling the barriers to the incorporation of this practice, seeking the improvement of work processes in all its dimensions.

Palavras-chave: Nursing. Clinical nursing research. Professional practice. Evidence-based practice. Evidence-based nursing.

### INTRODUCTION

Currently, discussions about the importance of conduct and actions of health based on the best available have emphasized in the academic, clinical and in the formulation of public policies of different countries. Experience an era when translating scientific evidence into action is essential for the provision of assistance with the highest degree of quality possible.

The last decades have marked by intense transformations in the organization of work in the area of health, determined by changes in corporate culture and in individual knowledge, as well as by technological development and incorporation of increasingly advanced methods for prevention, diagnosis and treatment of diseases. Such changes and advances change the process of care and professional practice of the nurse, requiring your constant updating and improvement.

Thus emerges the need to incorporate the technologies available on the market and follow up such development, with new thoughts and ways of acting. Alongside technological advancement, there is an increase in the production and dissemination of

scientific knowledge, numerous evidence from surveys conducted in order to prove the effectiveness of interventions and support the decision-making of the nurse.

In this context, the decade of 1970 marked by greater appreciation of scientific knowledge, with the rise of evidence-based Practice (PBE), which defined as the judicious use of research findings in work processes, considering also the professional skill and the preference of the patient<sup>(1)</sup>.

Currently, the PBE is a strong strand in the health area of developed countries, conducting research, teaching and practice of care. The PBE as one of the main strategies for decision-making led to the reformulation of the undergraduate curriculum in Europe, with a view to training professionals able to implement this practice<sup>(2)</sup>. In Brazil, the movement of PBE is still not widespread in nursing work and in the process of formation of nurses; it becomes necessary to reflect on the theme and extension of your disclosure by the scientific community. Thus, the goal is to reflect evidence-based practice in nursing work process.

### **METHODOLOGY**

<sup>\*</sup>Nurse. PhD in History.Professor at the Department of Nursing and at the Postgraduate Program in Nursing of the Federal University of Paraná. Curitiba, PR, Brazil. E-mail: profa.mitzy@ufpr.br

<sup>\*\*</sup>Nurse. PhD Student in Nursing, Federal University of Paraná.Professor at the Technical Course in Nursing of the Federal Institute of Paraná. Curitiba, PR, Brazil. E-mail: gabriella.lemes@yahoo.com.br

\*\*\*Nurse. PhD in Nursing. Professor at the Technical Course in Nursing of the Federal Institute of Paraná. Curitiba, PR, Brazil. E-mail:

<sup>\*\*\*</sup>Nurse. PhD in Nursing. Professor at the Technical Course in Nursing of the Federal Institute of Paraná. Curitiba, PR, Brazil. E-mail: edivanepedrolo@gmail.com

<sup>\*\*\*\*</sup>Nurse. Master in Nursing.Professor at the Technical Course in Nursing of the St. Peter the Apostle State College. Curitiba, PR, Brazil. E-mail: lind.iolline@gmail.com

lind.jolline@gmail.com
\*\*\*\*\*Nurse. PhD in Nursing. Nurse at the Federal Institute of Paraná. Curitiba. PR, Brazil. E-mail: derdriediohann@hotmail.com

Study of theoretical-reflective, whose rationale based on discursive formulation about the subject, sustained in national and international scientific literature and critical analysis of authors. Was based on the research of book chapters and scientific articles, and the books used are classics and reference on the subject. Based on theoretical construction about thinking reflective<sup>(3)</sup>, addressed historical aspects/conceptual PBE and discussed on the application of this tool in the fields of practice of nursing.

# EVIDENCE-BASED PRACTICE: HISTORY AND DEFINITIONS

Before be characterized as a profession, nursing was performed by lay people who paid patient care for solidarity, social obligation or imposition. In the old days, the health service mainly based on professional experience and expert opinion. These decision processes valued health professional's beliefs about what he believed is best for your patient, leaving the research and scientific knowledge in the background. The solidification of the scientific paradigm in nursing started with the work of Florence Nightingale (1820-1910)<sup>(4)</sup>.

Between 1900 and 1950, the research activities in nursing were still limited, but some studies were carried out aimed at: education; organization of services; quantitative and qualitative of professionals; and satisfaction of patients and crew<sup>(1)</sup>.

In the United States of America (USA), the year 1952 marked the expansion of research in nursing specialty areas such as community health, psychiatry, pediatrics and obstetrics, due to greater public investment.

Facing the growing nursing scientific development, noted that the evidence generated by researchers around the world would not the professionals health and patients so updated and reliable, with the purpose to address the gap between research and practice<sup>(1)</sup>.

Therefore, seeking to overcome this gap, the Evidence-based Practice (PBE) appears in the 1970 as a movement to use conscientious, explicit and judicious of the best available evidence on clinical decision making about care to individual patients. Search-if recognize publications with best scientific rigor (well designed and well conducted studies, with number sampling appropriate), compile these studies and make them accessible to professionals of health,

thus reducing the uncertainties clinics<sup>(5)</sup>.

Highlights that the term evidence-based, it was first used in the field of medicine, precursor of the movement area, as a new paradigm for medical practice and basis for clinical decisions, where these evidences and research s clinics should be promoted s above the intuition and the opinion of experts(1;5). Later, the term was applied to many other aspects of health and related areas, including nursing.

The search results considered main sources of evidence, also employs the patient's preferences, population patterns, clinical *expertise* and laws<sup>(5)</sup>. The evidence classified in levels of strength, methodological rigor from generating sources.

The capacity of each design to control bias determines the strength of the evidence, establishing a hierarchy, in which systematic reviews of randomized trials occupied the highest rank.

The PBE based on the triad consisting of the following elements: evidence s, abilitys clinic with the professional and preferences of the patient, which should considered together in your implementation<sup>(6)</sup>. The integration of these three elements provide a relationship between diagnosis and therapy able to optimize more effectively the clinical outcome and quality of life.

The application of PBE encompasses the holding of five steps: (1) turns of a question in question. (2) the pursuit of best evidence to answer it; (3) evaluation of validity, impact and applicability the information; (4) integration of evidence with clinical experience and the characteristics of the patient; and (5) evaluating the results obtained<sup>(5)</sup>.

The movement of the PBE emerged evidence-based Nursing (EBE), in order to improve the care provided to the patient. The components of evidence-based nursing decision are the following: insight and expertise of nurses; evidence of valid and relevant research; preferences and circumstances of the patient; and resources available<sup>(5)</sup>.

In a report prepared in the year 2001, the Institute of Medicine encourages health workers to provide service using this practice<sup>(7)</sup>. Thus, the SBS is a movement that is growing largely in recent years, including the creation of entities and specialized magazines, such as the Evidence-Based Nursing.

# APPLICATION OF EVIDENCE-BASED PRACTICE IN NURSING

Scientific research in the area of nursing growing

constantly, especially with regard to clinical research, with well-defined methods and strong degree of evidence in order to support and subsidizing. However, the gap between research and practice still prevails. Despite the growth, the lag published research is still hindering the implementation of EBE in work processes and in professional practice of nurses. Consequently, the best evidence available in the best possible place.

More methodologies employed in Brazilian publications about PBE and health are systematic review with or without meta-analysis, review of protocols, study synthesis of evidence already available and integrative review. While the publications predominantly derived from the medical field, there is the presence of other occupational categories, with emphasis on nursing. Thus, the PBE is feature of research multidisciplinary<sup>(8)</sup>. It observed that the experiment considered gold standard of PBE – randomized controlled trial – still not found among the publications in the area of nursing, which ultimately negatively affect production of systematic reviews, which represent the highest level of evidence possible.

The use of evidence in the work processes of health professionals about both positive and negative reactions in the media and academics. The positive reactions refer to reach better results, especially clinicians; already the limitations are n the difficulty of extrapolating from evidence for the care of individual patients, in the need for basic knowledge of methodology, in the difficulty of access to evidence, and no shortage of professionals' time. This practice of dynamic adaptation to challenge tends to qualify the services and improve the professional-patient relationship<sup>(4)</sup>.

Translating knowledge into action on health care is complex process, dynamic and in constant evolution<sup>(9)</sup>. Few institutions in Brazil recognized by the use of the PBE on their work processes, being a move rarely found as part of routine health care workers. Nevertheless, still the PBE has used in professional practice of nurses, even in short steps.

This is evident when it is shown that both healthcare facilities as nursing education, have been developing studies and researches aiming to test welfare models, in which the nurse is the center of the process, because it is he who observes, evaluates, questions, communicates and implements new knowledge in practice clinic<sup>(10)</sup>.

The examples of use of the PBE on healthcare practice found in national and international literature,

with positive effect on the result. In: evidence-based clinical audits for recent mothers, who had positive impact on childbirth assistance normal<sup>(9)</sup>; construction of instrument for Nursing history in pediatric intensive care unit, reducing the odds of failure in implementing the nursing process<sup>(11)</sup>.

It understood that the use of scientific evidence could use not only for the history of nursing, but in every stage of systematization of nursing care (SAE), especially in the preparation of the plan of care/nursing planning. As an example, the nurse should support in scientific evidence in the selection of the best technology for performing procedures such as injury cover, fixing intravenous devices, hospital infection prevention, among others, in order to achieve the best clinical results.

In this way, the professional turns out to provide evidence-based care as a replacement for careful empirical. The challenge is to identify the needs for assistance in the daily life of the professional, get your answers in the scientific literature and study them critical. Thinking about the stages of SAE, this includes listing the priority nursing diagnoses, adjust a care plan for the resolution of each diagnosis, implement and evaluate your actions impact on the patient. Whenever possible such actions must scientifically prove effectiveness through research with a strong degree of evidence.

Another aspect that encourages reflection is the use of the PBE in process of formation and updating of the nurses. Although if you want this professional will become consumers of research, with a view to the development of health and nursing practice, research not always incorporated as an activity in your process of formation<sup>(12)</sup>. Once the professional never used to make part of the everyday during your research training, the implementation of this practice in their work processes becomes more intricate and requires greater intellectual effort.

The National Curriculum Guidelines (DCNs) for undergraduate courses in health guide for training which promotes intellectual development and permanent training in the pursuit of professional autonomy. Accordingly, the guidelines of the unified health system (SUS) advocate general skills that should be six common to all health professionals, among them the 'making decisions based on scientific evidence'. This means support of professional practice in the ability to make decisions for the appropriate use, effectiveness and cost-effectiveness of the work force, of medicines, equipment, procedures, and practice<sup>(13)</sup>.

In these contexts, the PBE would be a valuable strategy for the achievement of these goals, since incorporated into the training process.

In Argentina, it demonstrated that the PBE if not configures as a structured content within the undergraduate courses in nursing, however the graduates recognize the need to incorporate the PBE on training professional<sup>(14)</sup>.

With respect to permanent education, highlights the importance of linking the PBE to education of the nursing staff, and the nurse is responsible for promoting and sustaining this reality. The PBE should act as scaffolding for an education with emphasis on research and seeking the best evidence, setting up a major step to improve the quality of care provided to the patient<sup>(14)</sup>.

When considering the political dimension of nursing, the incorporation of evidence has been taking significant space in ministries and organizations. The Ministry of health offer to all professionals and students from Brazil's health scientific databases to assist in clinical decision-making and management, through Evidence-based Health Portal (Portal SBE)<sup>(15)</sup>. From 2012, it is possible for any of the 14 areas of health, with your respective council logging, access the Portal and search the best evidence available for a particular subject.

From 2015 the Portal SBE is strengthened by partnership with the The Pan American Health Organization (PAHO), World Health Organization (who) in Brazil and Latin American Center and the Caribbean health sciences information the PAHO/who (BIREME/PAHO/WHO). The aim is to incorporate the PBE the worker process of professionals and scholars of health, understanding how important movement of change in social assistance practices, as well as to disseminate and encourage the use of evidence in health.

In short, for serving evidence-based practice? Certainly, it is essential to provide effective assistance, with quality, safety and lower risk to the patient and professional, often combined with a lower cost and shorter time to perform a procedure through the incorporation of new technologies of care.

In this sense, government initiatives have created to develop the scientific, technological and productive capacity, such as the Secretariat of Science, Technology and Strategic Inputs from the Ministry of Health (SCTIE), which formulates and implements national policies for science, technology and innovation in health, and promotes research through

federal funding.

Linked to the SCTIE, the National Commission on incorporation of technologies in the SUS (CONITEC), which advises the Ministry of health on incorporation, deleting, or changing health technology by SUS as well as in the Constitution or alteration of clinical protocols and guidelines. Once again, the application of the PBE on political dimension, since the analysis of the processes of incorporation of technologies based on evidence, taking into account aspects such as the efficiency, accuracy, effectiveness and safety of the technology.

On the national scene, the organizational contexts, ignorance in using research tools and in interpreting, the results of research are common barriers to PBE<sup>(16)</sup>. On the other hand, the higher vocational training more positive attitudes in relation to the implementation of the PBE in your practice clinic<sup>(17)</sup>.

The diffusion of the search methods of research and the dissemination of the same, as well as institutional incentives, are strategies to expand the use of the PBE. It should note that this practice requires previous evaluation by who performs, because you cannot just implement an evidence to any type of situation. She needs to be similar or close to, the context in which the research conducted, otherwise, replicates itself without analysis and discussion, which cannot generate response positive<sup>(18)</sup>.

## FINAL CONSIDERATIONS

This reflection puts us ahead of the challenge of nursing work in the transformation and adaptation of your clinical practice. It is a fact that the last few decades have marked by an increase in completion and publication of scientific research able to support evidence-based practice in Brazil; however, there is still a gap between the available evidence and clinical practice of these professionals.

Although the PBE is, subject of numerous scientific events and is present in various journals and publications of the Ministry of health, the emerging need to extend this movement and incorporate it into clinical practice of health care professionals, starting by your training. The inclusion of the subject in the curriculum of undergraduate and graduate programs in nursing, as well as the use of PBE as part of teaching methodology, influence and encourage the student to make the search of scientific evidence essential for their studies and decision-making, making it easier and

reduces the barriers to your incorporation in the future professional practice.

The search carried out for the development of this reflection indicate that in the international arena, whereas developed countries, the incorporation of the work processes of the PBE nurse is advanced with regard to underdeveloped countries. This is a reality where some institutions have the movement in a cast in your practice, being part of the daily life of the professional evidence-based decision-making.

Already at the national level, many barriers found to the effective incorporation of PBE in clinical

practice. In general, the country faces structural deficit, and personal as well as professional motivation, worn and often resistant to changes in your way of thinking, acting and working. We need to reflect and to raise such professionals about the value and importance of search results for your professional practice, fighting the barriers and transforming work processes in all dimensions of performance — education, care, management, and policy research — implying in improvements in the health system.

# IMPORTÂNCIA DA PRÁTICA BASEADA EM EVIDÊNCIAS NOS PROCESSOS DE TRABALHO DO ENFERMEIRO

### **RESUMO**

Atualmente, práticas e condutas de saúde devem embasar-se na melhor evidência disponível, assunto enfatizado no meio acadêmico de diversos países. O objetivo deste artigo é refletir acerca da Prática Baseada em Evidências no processo de trabalho da enfermagem. Trata-se de estudo teórico-reflexivo, baseado na literatura científica e análise crítica dos autores. A Prática Baseada em Evidências surge como um movimento para uso criterioso de resultados de pesquisas científicas na tomada de decisão clínica. O principal desafio para o cuidado baseado em evidências é a sua implementação, pois traduzir o conhecimento em ação é processo complexo. Esta reflexão nos coloca à frente do desafio da atuação de profissionais da saúde na transformação e adequação de sua prática clínica. É fato que as últimas décadas foram marcadas por um aumento na produção de pesquisas científicas nacionais para subsidiar a Prática Baseada em Evidências, entretanto a lacuna entre pesquisa e prática ainda prevalece. É preciso conscientizar os profissionais, gestores, e principalmente usuários e pacientes sobre a importância de combater as barreiras para a incorporação desta prática, buscando a melhoria dos processos de trabalho em todas as suas dimensões de atuação.

Palavras-chave: Enfermagem. Pesquisa em enfermagem clínica. Prática profissional. Prática clínica baseada em evidências. Enfermagem baseada em evidências.

# IMPORTANCIA DE LA PRÁCTICA BASADA EN EVIDENCIAS EN LOS PROCEDIMIENTOS DE TRABAJO DEL ENFERMERO

### RESUMEN

Actualmente, prácticas y conductas de salud deben basarse en la mejor evidencia disponible, asunto resaltado en el ámbito académico de diversos países. El objetivo de este artículo es reflexionar acerca de la Práctica Basada en Evidencias en el procedimiento de trabajo de la enfermería. Se trata de un estudio teórico-reflexivo, basado en la literatura científica y el análisis crítico de los autores. La Práctica Basada en Evidencias surge como un movimiento para el uso ponderado de resultados de investigaciones científicas en la toma de decisión clínica. El principal reto para el cuidado basado en evidencias es su aplicación, pues traducir el conocimiento en acción es proceso complejo. Esta reflexión nos pone frente al desafío de la actuación de profesionales de la salud en la transformación y adecuación de su práctica clínica. De hecho, las últimas décadas fueron marcadas por un aumento en la producción de investigaciones científicas nacionales para subvencionar la Práctica Basada en Evidencias, aunque la laguna entre investigación y práctica todavía prevalece. Es necesario concienciar a los profesionales, gestores, y principalmente a usuarios y pacientes sobre la importancia de combatir las barreras para la incorporación de esta práctica, buscando la mejoría de los procedimientos de trabajo en todas sus dimensiones de actuación.

Palabras clave: Enfermería. Investigación en enfermería clínica. Práctica profesional. Práctica clínica basada en evidencias. Enfermería basada en evidencias.

## REFERENCES

1. Okuno MFP, Belasco A, Barbosa D. Evolução da pesquisa em enfermagem até a Prática Baseada em Evidências. In: Barbosa D, Taminato M, Fram D, Belasco A. Enfermagem Baseada em Evidências. 1ª ed. São Paulo: Editora Atheneu; 2014. p. 1-7.

2. Ruzafa-Martinez M, Lopez-Iborra L, Moreno-Casbas T, Madrigal-Torres M. Development and validation of the competence in evidence based practice questionnaire (EBP-COQ) among nursing students. BMC Med Educ. [online]. 2013 [citado 2017 ago 17]; 13:19.

### Disponível em:

 $\label{lem:http://bmcmededuc.biomedcentral.com/articles/10.1186/1472-6920-13-19.} \\$ 

3. Souza RA. Os fundamentos da pedagogia de John Dewey: uma reflexão sobre a epistemologia pragmatista. Rev Contrap Eletr. [online]. 2012 [citado 2017 ago 17]; 12(2):227-33. Disponível em: https://siaiap32.univali.br/seer/index.php/rc/article/view/2087/2247.

 Bork AMT. Enfermagem Baseada em Evidências. 1ª ed. Rio de Janeiro: Guanabara-Koogan; 2005.

5. Cullum N, Haynes RB, Marks S. Enfermagem baseada em

evidências: uma introdução. 1ª ed. Porto Alegre: Artmed; 2010.

- Houser J, Oman KS. Evidence basead-practice: an implementation guide for healthcare organizations. Canadá: Jones & Bartiett Learning; 2011
- 7. Garcez RM. As melhores práticas de enfermagem: procedimentos baseados em evidências. 2ª ed. Porto Alegre: Artmed; 2010.
- 8. Lacerda RA, Nunes BK, Batista AO, Egry EY, Graziano KU, Angelo M, et al. Práticas baseadas em evidências publicadas no Brasil: identificação e análise de suas vertentes e abordagens metodológicas. Rev Esc Enferm USP. [online]. 2011 jun. [citado 2017 mar 8]; 45(3):777-86. Disponível em:
- http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S0080-62342011000300033.
- 9. Côrtes CT, Santos RCS, Caroci AS, Oliveira SG, Oliveira SMJV, Riesco MLG. Metodologia de implementação de práticas baseadas em evidências científicas na assistência ao parto normal: estudo piloto. Rev Esc Enferm USP. [online]. 2015 [citado 2017 mar 8];49(5):716-25. Disponível em: http://www.scielo.br/pdf/reeusp/v49n5/pt\_0080-6234-reeusp-49-05-0716.pdf.
- 10. Gerolin FSF, Cunha ICKO. Modelos Assistenciais na Enfermagem - Revisão de Literatura. Enferm Foco. [online]. 2013 [citado 2017 mar 8]; 4(1):33-6. Disponível em: http://revista.portalcofen.gov.br/index.php/enfermagem/article/view/50 0/190.
- 11. Santos DMA, Sousa FGM, Paiva MVS, Santos AT, Pinheiro JMS. A enfermagem baseada em evidências apoiando a construção do histórico de enfermagem: uma pesquisa bibliográfica. Cienc Cuid Saude. [online]. 2016 [citado 2017 mar 8]; 15(3):561-9. Disponível em: http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/26 357/18081.
- 12. Cometto MC, Ávila G, Gómez P. Incorporación de contenidos de enfermería basada en evidencia (EBE) en los currículos de estudio de la licenciatura de enfermería de la universidad nacional de córdoba. Rev Iberoam Educ Invest Enferm. [online]. 2012 [citado 2017 mar 8];

2(3):26-32. Disponível em:

http://www.enfermeria21.com/revistas/aladefe/articulo/43/.

13. Varela DSS, Carvalho MMB, Barbosa MUF, Silva IZF da, Gadelha RRM, Machado, MFAS. Diretrizes Curriculares Nacionais e a Formação de Profissionais para o SUS. REBES. [online]. 2016 [citado 2017 mar 8]; 6(3):39-43. Disponível em:

http://www.gvaa.com.br/revista/index.php/REBES/article/view/3928/3865

14. Silva RC da, Finamore EC, Silva EP da, Barbosa VJ. O papel do enfermeiro como educador e pesquisador, e a integração entre prática baseada em evidências e educação permanente. Percurso Acadêmico. [online]. 2015 [citado 2017 mar 8]; 5(10):417-30. Disponível em:

http://periodicos.pucminas.br/index.php/percursoacademico/article/view/2313/9268.

- 15. Ministério da Saúde(BR). Portal Saúde Baseada em Evidências [citado 2017 mar 8]. Disponível em: http://psbe.ufm.br/index.php.
- 16. Rospendowiski K, Alexandre NMC, Cornélio ME. Adaptação cultural para o Brasil e desempenho psicométrico do "Evidence-Based Practice Questionnaire". Acta Paul Enferm. [online]. 2014 [citado 2017 ago 17]; 27(5):405-11. Disponível em:

http://www.scielo.br/pdf/ape/v27n5/pt\_1982-0194-ape-027-005-0405.pdf.

17. Pérez-Campos MA, Sánchez-García I, Pancorbo-Hidalgo PL. Knowledge, attitude and use of evidence-based practice among nurses active on the internet. Invest Educ Enferm. [on-line]. 2014 [citado 2017 ago 17]; 32(3):451-60. Disponível em:

http://www.scielo.org.co/pdf/iee/v32n3/v32n3a10.pdf.

18. Oliveira ARS, Carvalho EC, Rossi LA. Dos princípios da prática à classificação dos resultados de enfermagem: olhar sobre estratégias da assistência. Cienc Cuid Saude. [on-line]. 2015 [citado 2017 mar 8]; 14(1):986-92. Disponível em:

http://www.periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/22034/14208.

**Corresponding author:** Gabriella Lemes Rodrigues de Oliveira, Avenida Pref. Lothario Meissner, 632, 3º andar - Jardim Botânico CEP: 80210-170 Curitiba-PR. E-mail: gabriella.lemes@yahoo.com.br

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