



WHAT IS THE PREVALENCE OF THE VARIOUS COMPLICATIONS OF ARTERIOVENOUS FISTULA IN ADULT CHRONIC HEMODIALYSIS?



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INTRODUCTION

The Arterio-Venous Fistula (AVF) is the first choice of vascular access for hemodialysis but it represents a very issue in the patient's life.

It's his access to care, his quality of care and it remains his access to life. However, as in all pathologies, complications exist and some may compromise the life of the AVF. Which represents a real potential danger for the patient.

OBJECTIVES

The aim of this research is to determine for each complication, which are the most important in the hemodialysis population. Knowing which complication predominate could help nurses to prevent them and so they could detect them as early as possible to avoid or correct them quicker

METHODS

To find information about AVF's complications in dialysis, a search was conducted in Medline, Ulysse, and Google scholar, for resources published between 2000 and 2019 in English. The keywords "Complications, AVF, dialysis" were used in all relevant combinations but the result was too wide.

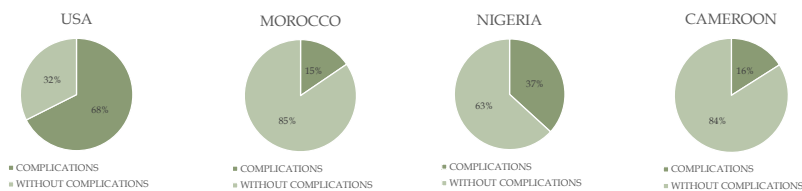
Some Keywords had to be added like "outcome". That work can't be limited to Europe or the United States because most of the articles which seems interesting, were done outside these territories (Cameroon, Iran, Morocco, Nigeria... Etc.). In that way, results can be confronted.

For each study, the method was different, but the results can still be compared.

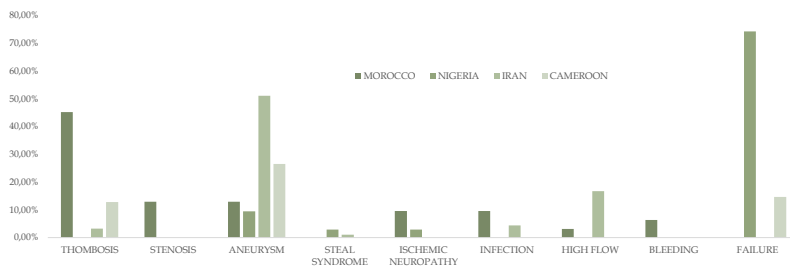
Time's study, country, how many dialysis centers, same surgery, financial resource, a lot of different factors but who brings a lot of data to make some conclusion.

RESULTS

AVF AND COMPLICATIONS



WHAT KIND OF COMPLICATIONS ?



Majority for: THROMBOSIS, STENOSIS, AND ANEURYSMS.

Stenosis, thrombosis and aneurysms are the worst complications in hospitalization, until the loss of vascular access and sometimes death.

HOW DETECT THOSE COMPLICATIONS ?

THROMBOSIS	SEVERE PAIN, TREMORS AND ABSENCE OF FEELING
STENOSIS	DIFFICULTIES IN CANNULATION, EDEMA, BLEEDING
ANEURYSM	ULCERATION, DEFORMED AVF, BLEEDING
STEAL SYNDROME	PALE AND COLD HAND, PAIN, NECROSIS
ISCHEMIC NEUROPATHY	PAIN, WEAKNESS OF THE HAND AND FINGERS
INFECTION	LOCAL SIGNS OF INFECTION
HIGH FLOW	PROLONGED BLEEDING TIME AFTER DIALYSIS
BLEEDING	HEMATOMA, BLEEDING
FAILURE	AVF's IMMATURE, ABSENCE OR LOW FEELING

AND ALSO...

Studies also show that certain risk factors increase the risk of complications:

- Female sex
- African race
- High age
- Diabetes
- AVF's type (Surgery and site)
- Dose of EPO

LIMITATIONS

The advantage of this research is also the limit on this study. They are not done in the same conditions. The simple fact that the type of surgery is different can change the result. The diagnosis of complications is also a costly procedure, and for example in Nigeria it couldn't be included in the result. The time of the study can also influence complications rate when we know that in Cameroon, 64% of complications are coming later.

AVF remains an expensive option and then in Nigeria, only 5% of the dialysis population has an AVF, which is very little compared to other country.

CONCLUSION

All the studies are saying that arteriovenous fistula is the best choice as vascular access for hemodialysis.

However, it has been demonstrated that, by some complications, it's an important factor in hospitalization and then in patient's mortality. It also remains a big challenge to help the quality's care of the patient but also in an economical way. They must be detected earlier to anticipate or avoid the surgery, the loss of vascular access, or even the death of the patient. It's important to form the staff who care those patients. Nurses have to be experimented and must have competencies to detect those problems. Only on that way, AVF will have the best chances to survive longer as possible.

In that way, the nurse practitioner will have all the competencies to answer that issue.

REFERENCES



DOES SUPPORTIVE CARE MEET THE SUPPORT NEEDS OF CANCER FOLLOW-UP PATIENTS ?

By PHULPIN Suzy – student nurse in advanced practice

INTRODUCTION

The care of each patient is unique.

In context of cancer pathology, it's essential to not limit ourselves only to conventional treatments proposed.

Today with evolution of treatment, it's important for patients and their families to promote care for a better quality of life by providing supportive care.

The care measures includes a set of care and support to fight the unwanted symptoms of the disease and treatment.

It's a coordination of skills at service of sick person and his family.

With the advancement of therapeutics, there is a life during and after cancer.

Supportive care meets the needs of patients followed in oncology?

The objectives of this study are:

- to identify unmet needs of patients followed in oncology
- to check the correlation between supportive care and unmet needs.

METHOD

This qualitative descriptive investigation analysis five studies in five different countries.

The keywords of the research were **oncology, supportive care and needs**.

Studies reviewed were identified on the basis of data from the University of Lorraine on the PubMed website essentially.

They must have been less than 10 years old and involved in quantitative studies and affected patients aged 18 and over.

The type, stage of cancer, and treatment followed weren't exclusion criteria for this study.

RESULTS



Figure 1: Unmet needs of oncology patients

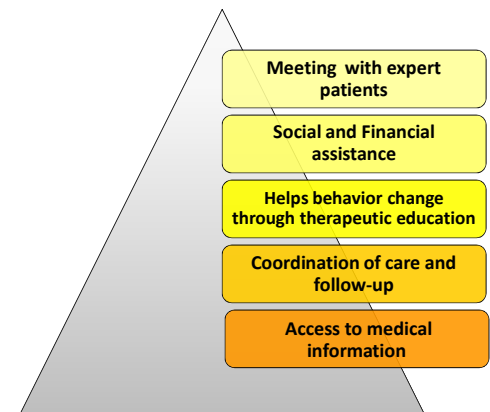


Figure 2: Existing but not sufficient support care to meet patients' unmet needs

CONCLUSION

This study shows that patients face many health problems that can call into question their quality of life and therefore constitute care measure that needs regardless of the type of cancer and its stage.

The analysis partially answers the original question.

Supportive care is provided from of medical care but don't fully satisfy patients, especially in terms of information transmission, coordination of care and follow-up and therapeutic education.

This study demonstrates that a multidisciplinary and specialized professionals are essential to promote satisfaction of the disturbed needs in these fields.

REFERENCES



Introduction:

The French version of nurse practitioner, « infirmier en pratiques avancées », has just been implemented in the french healthcare system. In several countries the advanced nurses exists since many years, and they are fully integrated professionals in the care system. Datas from this countries has the potential to underline the potential consequences of the implementation of this new profession for the french healthcare system.

Objectives:

Relying on the experience of other countries, this study performs a littérature review on the impact nurses practitioners have on primary care, in order to answer the following question : **does the introduction of NP nurses improve the performance of the healthcare system?** In order to answer that question, we compare doctors performances in primary care with NP nurses' ones

Methods:

- I built my corpus of academics articles on the impact of nurses practitioners on primary care by performing a keyword bibliographic research in Pubmed and Ulysse for ressources published between year 2000 and year 2019, in english and french. The key words: « nurses practitioners efficiency comparison primary care », « nurse practitioners higher supply », « nurse practitioner scope economic impact », « randomized control trial nurses practitioners » where used in all relevant combinaisons.
- An other research has been made on the conchrane library with the key word: « nurse substitutes. »
- To be included in the corpus, the articles must perform a documented comparison between doctors and advanced nurses performances in primary care (inclusion criteria) .**
- All the selected articles have gone throught a quality check based on Laval university methodology. 8 articles have been selected, one has been evicted because of it's irrelevance.
- The 8 selected articles were 3 randomized trial case studies, 2 systematic reviews, 1 national survey, 1 comparative study and one article from the Journal of the American Academy of Nurse Practitioners.

Limitations:

The differents studies took places in different countries. The institutional settings of healthcare systems and the exact scope of practice of the advanced nurses are different from one country to another: This leads to obvious methodological issues in the comparison, wich alters the strenght of this littérature review.

Conclusion: This study shows the benefits that advanced nurses can bring to primary care, without lowering the health care efficiency, neither from a budgetary point of view, nor from the perspective of the patient health. We must develop our own studies to have our real vision of the benefits and limitations that this new job will create in France. It will be our task to create exploitable databases aiming to demonstrate the usefulness of our new practice.

Results:



Titration and costs for Nurse Practitioners Heart Failure patients and patients attending usual care

	NpHP 2014 cost in 2014 (AUD)	Usual care 2010 Cost in 2014 (AUD)	Differences between groups (AUD)
Total cost for cardiac NP clinic	\$136.464	\$153.456	\$16.992
Cost per consumer	\$981	\$1104	-\$123
Cost per visit	\$316	\$480	-\$164

There is **no real cost difference** between advanced nurses and doctors: the longer consultations being counter balanced with the lower cost of advanced nurses. **But then for the same price, there is a higher patient satisfaction.**

What differences the studies shows between an advanced nurse and a doctor consultation:

The studies shows no differences between a doctor and a NP nurse consultation	Number of prescriptions
	Health outcome
The studies shows higher efficiency for the nurses than the doctors within their consultations	Number of exams performed
	Patient satisfaction with communication and explanation
	Consultation length
	Patient compliance to treatment
	Ask patients to come back

References:



Introduction

Type 2 diabetes is an important health problem worldwide. Type 2 diabetes is a disease which is at the origin of many complications. Nurse practitioners (NPs) have been following-up these patients for several years now and many studies in Canada, United States, United Kingdom and Australia have shown their effectiveness. But what strategies do NPs use to prevent diabetes complications when taking care of type 2 diabetic patients?



Methods

This search was conducted in *PUBMED*, *GOOGLE SCOLAR* and *EM CONSULT* in search of resources written in English and published between 2011 and 2019. The keywords [nurse practitioners]; [advanced practice nursing]; [diabetes mellitus, type 2] and [secondary prevention-complications] were used in all relevant combination. Keywords [diabetes mellitus, type1] and [children] were excluded. This yielded a total of 18 records, from which 13 we excluded as they did not discuss nurse practitioners or were too old. As a result, 5 studies from Canada, the United States, Australia and United Kingdom were analyzed.

Results

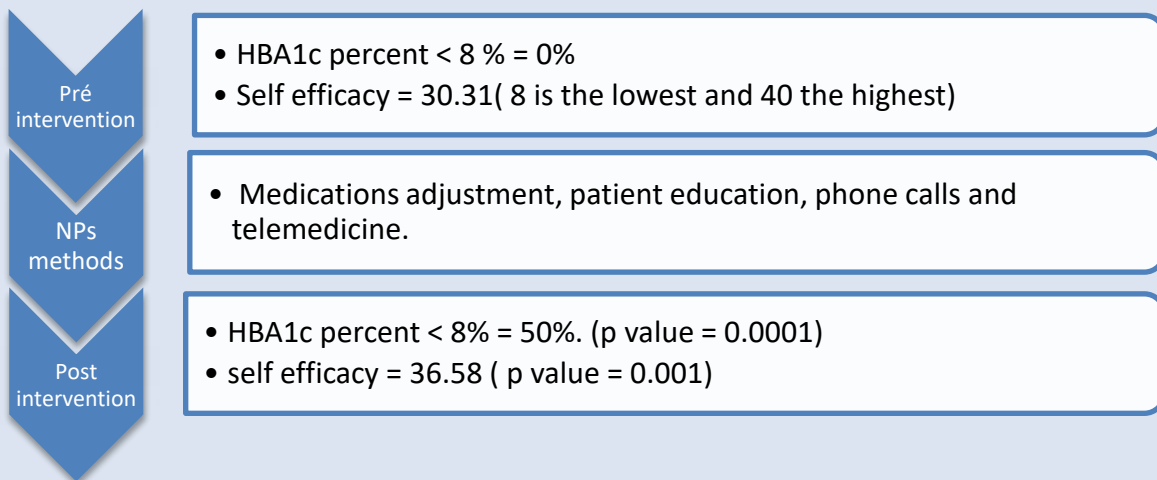
Strategy 1: Evidence Base Nursing (EBN)

Nurse Practitioners check laboratory results (as LDL level) and use EBN such as national diabetes recommendations. Using those data, they can prescribe appropriate medications and educate type 2 diabetes patients to change their lifestyle.

Strategy 2: Innovative methods of support

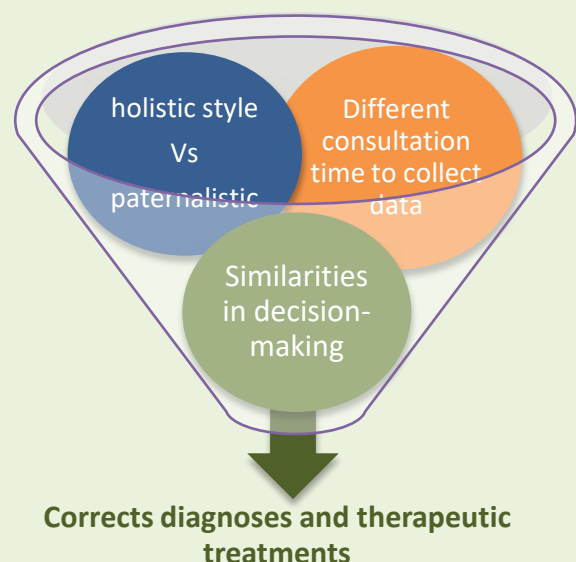
NPs use innovative methods of support to improve type 2 diabetes clinical outcomes and patients' self-efficacy: Medications adjustment, patient education, phone calls and telemedicine.

Clinical outcomes and self-efficacy comparison between pre-intervention and post-intervention



Strategy 3: Holistic consultation style

NPs and medical doctors use similar cognitive decision-making skill (in term of diagnosis). However, the two professions have very different consultation styles. NPs tend to be more holistic and require more time for the collection of historical data. On the other hand, Doctors consultations tend to be more paternalistic and shorter.

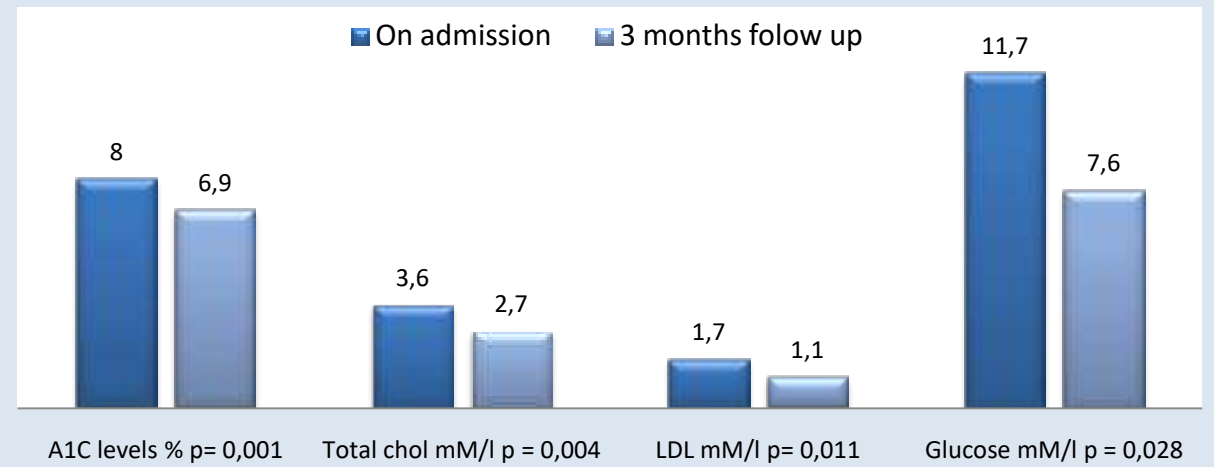


Strategy 4: Mobility for more efficiency

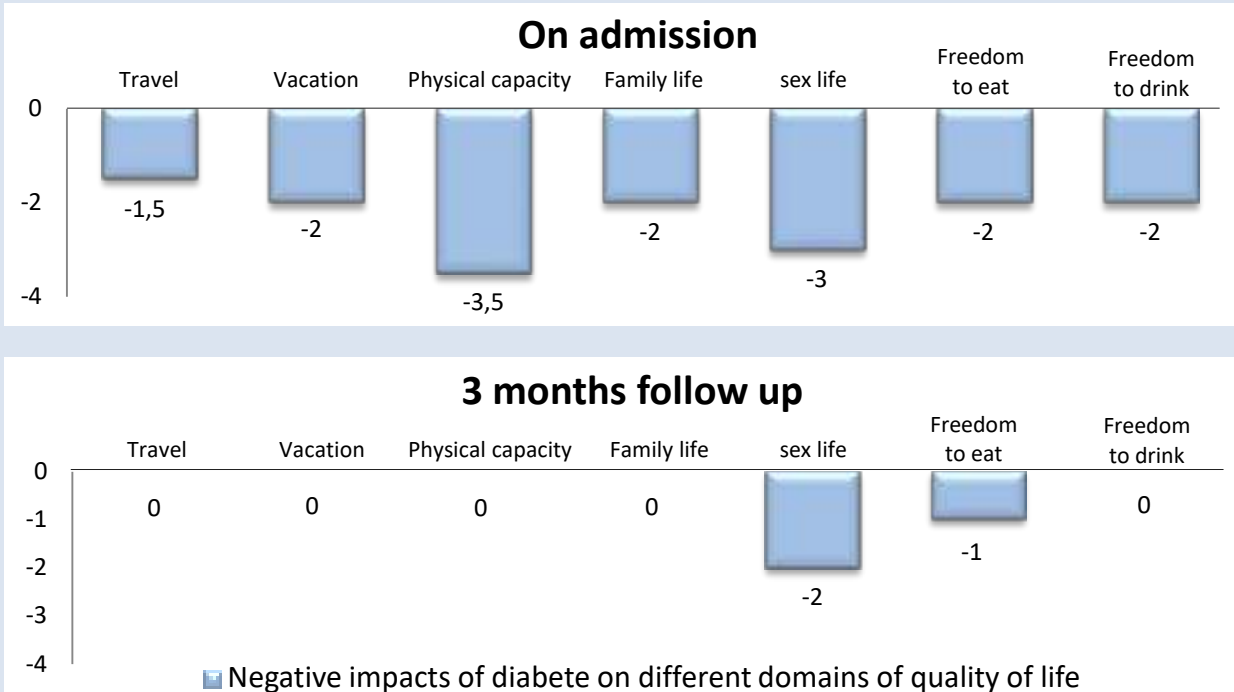
NPs can intervene with type 2 diabetes patients who are hospitalized in other units than diabetology. This intervention of a specialized NP in these units brings benefits in areas of glycemic control and various domains of quality of life.



Laboratory results comparison of patients admitted to the cardiology service with type 2 diabetes



Regression of the negative impact of type 2 diabetes on patients' quality of life



Strategy 5: Multi-pathology patient management

NPs have a care focused on the health of each patient with Multi-chronic diseases and strengthens the link between primary and tertiary care by collaborating with other professionals.

Global care for multiples chronic diseases patients, satisfaction after 6 months

Innovative care model with patients with multiple chronic diseases

Collaboration with other professionals, generalists and members of the multidisciplinary team.

Patient satisfaction :

87.1% : Quality of care and adequate consultation time

93.5% : Treatment

96.8% : NPs are attentive to their health concerns

Conclusion

Nurse Practitioners around the world demonstrate that they use different effective strategies to prevent type 2 diabetic patients from having complications. They use EBN, innovative methods, holistic consulting style and global care for multiples chronic diseases patients. They take care of diabetic patients when they are hospitalized in different units. They also develop collaboration with the others professionals. It would be interesting to transpose some of those strategies to French NPs working with type 2 diabetes patients and evaluate their effectiveness.

References

