

Nursing: evidence based practice project research paper example

[Health & Medicine](#), [Stress](#)



Introduction

Identifying and describing a researchable Problem

Essential hypertension is a term used to describe high blood pressure of unknown etiology. According to Messerli, Williams and Ritz (2007) this condition increases the risks of cerebral damage, renal dysfunction and cardiac disease. In industrialized nations there is a 90% risk of developing hypertension during an individual's life time. It means blood pressure readings above 120/80 moving towards 140/90 (Messerli et. al, 2007).

Approximately, 43 million Americans are hypertensive and using antihypertensive medication. This is 24% of the adult population. There are racial variations with blacks showing an incidence of 32. 4%; whites 23. 3% and Mexican Americans 22. 2%. Precisely, essential hypertension affects 95% of the world wide hypertensive population. The prevalence increases as the individual becomes older (Carretero & Oparil, 2000).

Since essential is idiopathic treatment appears to be explorative because studies are still, being conducted in relation to identifying the most appropriate approaches towards management of the dysfunction. Ongoing drug trials have been taken center stage in resolving hypertension internationally. So far no one drug therapy has successfully addressed resolution of hypertension as a disorder. As such, patients have been programmed into remaining on drug therapy for life without paying full attention towards life style changes and diet (Calhoun et. al, 2008)

Hence, the significance to nursing practice lays in management of essential hypertension through health promotion as well as health education.

Researchers have identified predisposing factors while still investigating an

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etiology, especially, as the incidence among African Americans escalates. This study seeks to explore management strategies of essential hypertension among high risk populations with the aim of investigating alternatives to extensive drug therapy approaches being adapted by modern science. Even though attempts have been made towards health promotion in regulating the emergence of essential hypertension among high risk populations it has not been the focus of essential hypertension intervention. More often patients end up being on life lone drug therapy for the condition.

Identifying 5 questions

Question 1:-

- Do patients diagnosed with essential, hypertension better managed with diet, exercise and life style changes intervention than drug therapy in reducing blood pressure to normal the classified range?

Explanation:

P- Patients diagnosed with essential hypertension

I-intervention – diet, exercise, life style changes

C- Drug/ medication

O-Reduction of blood pressure to normal range

Question 11:- Should the normal range of blood pressure at 120/80 be re-evaluated at 140/90 and above in patients diagnosed with essential hypertension to explore whether this range is normal for the high risk populations identified?

Explanation

P- Patients diagnosed with essential hypertension

I – re-evaluating present range with 140/90 as normal in high risk patients

C- Normal range 120/80

O- Developing a new normal range blood pressure range.

Question 111:-

How effective is anti-hypertensive drug therapy in patients diagnosed with essential hypertension in reducing complications as compared to when they do not use any therapeutic intervention?

Explanation

P- Patients diagnosed with essential hypertension

I-No therapeutic intervention drug, exercise, diet or life style changes

C- Therapeutic interventions drug, exercise, diet or life style changes.

O- Reducing complications

Question IV:-

Can a holistic approach towards the management of patients diagnosed with essential hypertension be more effective in creating a normal B. P range than individual interventions of drug therapy, diet, and exercise and life style changes?

Explanation

P- Patients diagnosed with essential hypertension

I-Holistic management approach

C-Drug therapy, diet, and exercise and life style changes

O - Creating a normal B. P range

Question V:-

Can people diagnosed with essential hypertension self-manage the conditions based on their perceptions of home remedies rather than drug therapies offered by doctors?

Explanation

P- People diagnosed with essential hypertension

I-Home remedies

C-Drug therapy

O-Self manage

Preliminary PICO question and description of each variable

- Do patients diagnosed with essential, hypertension better managed with diet, exercise and life style changes intervention than drug therapy in reducing blood pressure to normal the classified range?

Explanation:

P- Patients diagnosed with essential hypertension

I-intervention – diet, exercise, life style changes

C- Drug/ medication

O-Reduction of blood pressure to normal range

Explanation of Variables:-

Variables identified in this question are patients diagnosed with essential hypertension; diet, exercise, life style changes; drug/ medication and

reduction of blood pressure to normal range. The independent variable guiding this research is patients diagnosed with essential hypertension. Likewise, the dependent variables are diet, exercise, life style changes; drug/ medication. Reduction of blood pressure to normal range provides the research with its outcome variable.

Keywords

10 key words that can be used in literature review search are as follows:

- essential hypertension
- patients diagnosed with essential hypertension
- life style changes
- blood pressure
- normal range blood pressure
- anti-hypertensive medication
- diet
- exercise
- essential hypertension patient life style
- essential hypertension patient diet

Literature Review

Introduction

Hypertension is a serious problem in developed and developing countries as the prevalence of hypertension has increased. Hypertension affects both young and elderly people, but it is common among the elderly. The increase in cases of diabetes results from changes in lifestyle and lack of physical activity. Many people have changed their lifestyle and consume foods that

contain high fat and sugar content. This increases the risk of having hypertension by causing obesity and overweight. In addition to that, lack of physical activity results to hypertension. Most people do not exercise regularly as recommended and this has affected their health. The use of automobiles and lack of time to exercise has led to increase in hypertension cases. Hypertension is responsible for many deaths around the world. Researchers have examined different interventions used to manage hypertension including lifestyle changes, exercise and diet.

Literature review

The increase in incidences of hypertension has led to increase in research on hypertension and prevention. Scholars have examined hypertension and how lifestyle interventions can be used to prevent hypertension. Hypertension is caused by changes in life style, diet and exercise. Therefore, changing individuals eating habits, exercise and lifestyle facilitates the management of hypertension. Gupta and Gupta (2010) argue that hypertension is a public health concern in India and other countries and its prevalence is increasing quickly in all populations. The researchers believe that hypertension can be prevented using non pharmacological means such as lifestyle measures. Lifestyle changes are important in managing hypertension. The lifestyle changes include dietary intervention, physical activity and reduction in weight. Individuals at risk of having hypertension and patients diagnosed with hypertension should be provided with lifestyle interventions, dietary a physical activity intervention. This will reduce systolic blood pressure and diastolic blood pressure. Moreover, Judkins, Rugge and Lochner (2005)

believe that lifestyle changes are essential in managing and preventing hypertension. Lifestyle changes are considered first line therapy used to manage hypertension. The researchers reviewed different studies that examined the impact of different interventions such as exercise, diet and weightless. A systematic review and Meta analysis of studies done in 2002 showed that physical activity is essential in preventing and managing hypertension. A total of 15 studies with 770 subjects were reviewed. The subjects exercised for 40 minutes in a week. The researchers noted that 40 minutes sessions entailing moderate intensity in week led to reduction in weight, systolic and diastolic blood pressure by 4 mm Hg and 5 mm Hg respectively. Further, consuming diets that do not have a lot of fat and sugar reduces the risk of hypertensions. Individuals diagnosed with hypertension should consume a lot of fruits and vegetables. They should also eat legumes, nuts and whole grains. Weight reduction is also crucial in managing hypertension. A review of 18 studies with 2611 subjects showed that weight loss aids in managing hypertension. A weight loss of 3 percent and 9 percent is linked with reduction of diastolic and systolic blood pressure by 3 mm HG. Additionally, Nolan, Joffres, Robaitaille and Bancej (2012) also studied hypertension. Patients having hypertension should reduce their blood pressure to less than 140/90 mm HG. However, reducing the blood pressure to that level is a major challenge to patients and healthcare providers. The blood pressure levels can be sustained using lifestyle modification. The researchers 6, 142 Canadians having hypertension were included in the study. Most of the participants reported having changed their lifestyle to manage the condition. 89% changed the kind of diet they eat and 89%

limited consumption of salt. In addition to that, 80% tried to control and loss their weight if they were overweight. 80% started exercising often, 77% and 78% stopped smoking and reduced alcohol consumption. People who did not have adequate education and income did not change their lifestyle in order to control their blood pressure. Lack of education was considered a barrier in the prevention and management of hypertension via lifestyle changes. Also, lack of time prevented participants from exercising regularly. Therefore, considering the barriers to the use of lifestyle interventions to prevent and manage hypertension is important in improving patient's health.

Lastly, Han (2011) analyzed hypertension and how lifestyle changes led to reduction in blood pressure. The researcher believes that hypertension can be managed with lifestyle changes and medication. A total of 7463 participants with hypertension were used. The investigator determined whether participants got advice on treatment from the physician and how they used treatment to manage hypertension. The findings from the research showed that 91% of the subjects got advice from the physician concerning treatment alternatives. 80% used medications to manage hypertension. All adults used medication and lifestyle interventions to manage hypertension. The participants used more than treatment options to manage hypertension.

Conclusion

Therefore, lifestyle changes including changes in diet, physical activity are vital in reducing the prevalence of hypertension. Individuals having hypertension should focus on changing their diet and exercise to manage

their blood pressure. This will in turn enhance their health and quality of life. Hence, healthcare profession also should integrate lifestyle interventions in patient care.

Literature Review Summary Table

Translating Evidence Into Practice

The PICO question for this specific project is:

- Do patients diagnosed with essential, hypertension better managed with diet, exercise and life style changes intervention than drug therapy in reducing blood pressure to normal the classified range?

In terms of nursing practice, this question is significant for many reasons. Most importantly, it dramatically affects the extent to which patients will rely on medical care to deal with their symptoms of hypertension. If lifestyle change-based interventions can contribute to better management of hypertension, there is not as much need for constant medical care and regulation of drug therapy, which also provides more effective outcomes for nursing practice, to say nothing of better resource allocation.

The literature review conducted to address this research question concludes that the introduction of lifestyle changes and diet/exercise regimens to patient and nursing practice provides better outcomes than drug therapy in terms of reducing blood pressure to normal range. Most of the studies included provide sufficient evidence for positive outcomes resulting from lifestyle changes in patients with hypertension. The majority of these studies provided lifestyle change interventions that included things such as moderate aerobic exercise, reduction in salt intake and changes in overall

diet, and other lifestyle changes. In Guptha & Gupta (2010), patients were shown to have very positive and effective outcomes through the regulation of lifestyle changes and diet/exercise regimens, effectively managing the patients' hypertension and lowering their blood pressure. In Nolan et al. (2012)'s study, the investigators noted that change of lifestyle is crucial in managing and preventing hypertension. However, a lack of education and time to exercise affected changes in lifestyle and hypertension prevention in the subjects studied. To that end, it is absolutely vital that nursing practice include working with patients to give them the time-based resources and education to allow patients to fully understand how to change their lifestyles to prevent hypertension.

The evidence-based practice that has been identified in this literature review can help lead to better outcomes for patients suffering from hypertension. By changing their diet to reduce salt intake and increase the number of vitamins and minerals acquired through vegetables, fruits and lean meats, blood pressure can dramatically reduce in hypertension sufferers. The addition of regular aerobic exercise to a patient's daily routine can also help to improve cardiovascular strength and further lower blood pressure. Other lifestyle changes, including sleeping habits, stress levels and more all contribute additionally to these positive outcomes. Nursing practice can utilize these findings to create diet/exercise/lifestyle change plans for patients suffering from hypertension, customized to each individual based on their needs, as well as have a baseline of activity that most sufferers must perform in order to achieve better outcomes. Possible negative outcomes from failing to use the evidence-based practice can be the continued higher blood pressure of

patients, whose condition may worsen due to lack of preventative and lifestyle-based care. This can lead to a greater need for drug therapy and medications, which can be a strain on organizational resources and nurses' time when compared to patients armed with self-sufficient lifestyle changes (which they can perform on their own).

In order to disseminate the evidence-based practice identified in this practice setting, there are many avenues that could be taken. Organizational meetings between nurses, or with hospital doctors and administrative staff, can be conducted to emphasize the importance of teaching lifestyle changes to patients. Action plans can be coordinated that will assist practitioners in giving the correct advice to patients regarding making these diet/exercise changes. The importance of this practice would be communicated to my colleagues through the use of statistics, charts, et al. based on evidence found in this study and project; studies would be administered and referenced in these communications to provide data backing up my assertions.

Once the information is disseminated, the organization would implement the evidence-based practice through training and education of nurses on strategies to recommend lifestyle changes to patients. These trained nurses would then talk to patients with hypertension during hospital visits to pass on these strategies to them. This provides a streamlined and effective transfer of information from administrators to practitioners to patients, allowing them to take ownership of their own treatment through specifically-beneficial lifestyle changes to lower their blood pressure. I do not anticipate opposition and concerns to practice changes, but some negatives may

include a wariness about the change in practice in general, and confusion about what to recommend to specific patients. In order to address these concerns, a standardized baseline of lifestyle change recommendations should be created by the organization as a default recommendation for patients with hypertension, with allowances for adjustments based on patients' unique needs. With these strategies, an effective addition of evidence-based practice to nursing should be accomplished.

Summary

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