Hypertension Case Study

Student's name

Institution

Hypertension Case Study

Hypertension is among the preventable contributors to death and diseases. Different evidence obtained from various controlled trials has highlighted the significance of using antihypertensive drugs to treat and reduce the health outcomes in patients suffering from the disease (James et al., 2013). In most cases, hypertension is a common condition evident in the primary care which leads to stroke, myocardial infarction, death, and even renal failures. To this effect, many patients need assurances that their blood pressure treatment will help in reducing the burden of the disease. The clinicians have tried to utilize the best scientific evidence to manage hypertension. Therefore, developing an evidence-based management plan would be prudent to treat hypertension as demonstrated in this paper.

Evidence-based management plan

	Practice Recommendations
Detection and diagnosis	The clinician will have to assess the patient's blood pressure to facilitate the detection of the syndrome.
	The nurse is must utilize the best and appropriate technique to assess patient's blood pressure, especially by utilizing a properly calibrated and maintained equipment (Go et al., 2014).
	The Nurse has to be knowledgeable about the process meant to diagnose hypertension.
	The clinician needs to educate the patient about home/self-blood pressure monitoring methods and guide the client on the acquisition of

	the best equipment for potential monitoring and diagnosis of hypertension.
	The nurse has to educate the patient about the targeted blood pressure and the benefits of maintaining their target (CDC, 2014).
Development and Assessment of the Treatment Plan	
Lifestyle Interventions	The nurse needs to help the patient in identifying lifestyle factors which influence hypertension management (Ball et al., 2015). This will help to identify potential areas for change; hence, creating a collaborative management plan that can fulfill patient's goals and prevent further problems.
Diet	The nurse will have to assess the dietary risk factors to help manage the situation. This will require the collaboration with different stakeholders including healthcare teams and dietitians.
	The clinician will educate the patient about the importance of consuming the DASH (Dietary Approaches to Stop Hypertension) diet (Go et al., 2014).
	In collaboration with the healthcare teams and dietitians, the nurse will recommend the quantity of sodium intake (65-100 mmol/day).
Heavy Weight	The clinician will have to assess the patient's BMI, weight, and circumference of the waist.
	Patients with BMI ≥25 and waist circumference >102 cm must adopt weight loss strategies.

Smoking	The nurse must understand the relationship between the cardiovascular disease and smoking.
	The nurse must facilitate smoking cessation by implementing brief interventions at every visit after establishing patient's tobacco use status.
Medication	Obtaining patient's medical history is important. This will capture information on prescribed drugs, illicit and herbal drugs, and over-the-counter drugs.
	Nurse to educate the patient on the pharmacological management of the disease together with pharmacists and physicians.
Evaluation of observance	The nurse has to create therapeutic relationship with patient
	Explore patient's beliefs and expectations relating to management of the disease
	Assess how patient complies with the treatment plan at each scheduled visit

Educational Plan

- Education is an important factor to consider when anticipating a healthy society. Patients need education about the treatment and conditions regarding the disease. The education effort shall ensure the nurse:
- Teach patients about self-monitoring skills
- Inform clients about their blood pressure levels

- Emphasize the benefits of continuing with treatments because patients can never tell whether the blood pressure is elevated. Through education, patients will understand that control is different cure (Go et al., 2014)
- Raise questions and concerns about the disease and provide opportunities which allow patients to share their specific behaviors; hence, allow for proper treatment recommendations (CDC, 2014).
- Inform patients about the best treatment by providing them with appropriate written and oral information.
- Educate members of the family, so that they can become part of the blood pressure control regimen; thus, offer daily reinforcement.
- Skill building, patient education, trustful relationship, and effective communication are essential to achieving sustained blood pressure control (Himmelfarb et al., 2016).

Health promotion

Studies have identified various interventions which can be used to improve adherence among the hypertensive patients (Institute of Medicine, 2010). Nonetheless, Himmelfarb et al. (2016) recommend a patient-specific approach to be necessary for promoting adherence. No matter the intervention, the nurse must inform and motivate patients about the behavioral and cognitive self-regulation methods so that they can cope with the treatment (Ball et al., 2015). The promotion would be conducted as:

Strategies	Specific approaches
Counseling about the schedule	• Request patient to carry along all pill vials during visits • Explain to patient that different drugs can be used

	• Make the client understand that the drug will be taken for life
Medication delivery alternatives	• Consider using different medication delivery systems like dosette • Switch medication packaging like blister or vial packs
Prompt medications	• Convenience of care including workplaces • Schedule pill taking depending on the daily events including brushing teeth or meals • Introduce phone reminders, beepers, computer reminders, or reminder cards (WHO, 2014).
Monitor compliance with appointments and treatments	• Make phone calls for those patients who miss appointments • Remind patients about the upcoming appointments and medications in advance
Reinforcement	• Encourage self-BP monitoring • Take blood pressure and share with patients about their personal blood pressure targets at each appointment
With patient's permission, involve family members	• The knowledge about the patient's treatment plan by family members can promote compliance with medication regimen

Follow-up and referral

Follow-ups and monitoring are necessary for pains with the silent killer syndrome. This monitoring and follow-ups can be conducted in different settings include homes and clinics. Nonetheless, the nurse must consider frequent monitoring, especially for stable patients depending o the physiological status, the interventions, and response. According to CDC (2014), the frequency of monitoring patients with blood pressure should depend on various recommendations as defined in the table below.

Intervention	Frequency of Monitoring Blood Pressure	Comments
Lifestyle changes	3-6 months	Must be monitored every 1-2 months for patients with high blood pressure
Lifestyle changes and drug therapy	Monthly	Severe HTN, potential organ damage, and drug therapy intolerance require shorter intervals
	3-6 months when blood pressure is stable	Normotensive and stable patients should use home/self-monitoring equipment for one week every three months.

The follow-up visits are recommended when the tests have revealed that the patient has reached an adequate blood pressure target. The number of the follow-ups will depend on client's

compliance, the complexity of the treatment schedule, severity, inconsistency, and the non-pharmacological advice (WHO, 2014). When the client has achieved the targeted blood pressure level, it important for the nurse to undertake follow-up visits after every 3-6 months. However, in a case where the symptoms are severe, target organ damage, intolerance to antihypertensive drugs, or severe hypertension, the nurse needs to undertake more frequent visits.

Follow-up will include:

- Annual urine tests to detect proteinuria
- Measure weight and blood pressure
- Determine necessary blood work after every 6-12 months to measure the creatinine and serum potassium (Ball et al., 2015).
- Advice patients regarding non-pharmacological measures to help in controlling blood pressure
- Inquire about the general health status of patients, especially the treatment problems and side effects (Institute of Medicine, 2010).

Conclusion

Hypertension is a silent killer disease which must be acted immediately before it causes disaster in the world. As thing stand today, it appears that the modern population is staring at their death unknowingly. It is important to expand the role of nurses to help in controlling hypertension; thus, supplement and complement the efforts of physicians. The involvement of nurses should begin with the monitoring and measure BP and educate patients about the disease.

As demonstrated in this article, the roles of the nurses are inevitable in patient's evidence-based management plan of high blood pressure.

References

Ball, J., Dains, J., Flynn, J., Solomon, B., & Stewart, R. (2015). *Seidel's Physical Examination Handbook* (8th Ed.). St. Louis, MO: Elsevier Mosby.

Centers for Disease Control and Prevention (CDC). (2014, October 29). *High Blood Pressure Facts.* Retrieved From: http://www.cdc.gov/bloodpressure/facts.htm

Go, A.S., Bauman, M.A., King, S.M.C. et al. (2014). An Effective Approach to High Blood Pressure Control. *Hypertension, 63*, 878-885. Doi: https://doi.org/10.1161/HYP.0000000000000003.

Himmelfarb, C.R.D., Commodore-Mensah, Y., & Hill, M.N. (2016). Expanding the Role of Nurses to Improve Hypertension Care and Control Globally. *Annals of Global Health, 82*(2), 243-253.

Institute of Medicine. (2010). *A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension*. Washington, DC: The National Academies Press. https://doi.org/10.17226/12819.

James, P., Oparil, S., Carter, B.L. et al. (2013). 2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults. *Clinical Review & Education.* Retrieved from http://www.measureuppressuredown.com/HCProf/Find/BPs/JNC8/specialCommunication.pdf.

World Health Organization (WHO). (2014). *World Health Statistics 2014*. Geneva, Switzerland: World Health Organization.