Principles of and Approach to Chronic Disease Management – An Overview

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INTRODUCTION

Chronic diseases such as Ischaemic Heart Disease and Stroke, Type 2 Diabetes, COPD/Asthma and Hypertension are all increasing in the developing world. In the coming years they will impose an increasing burden on the health care systems of all developing countries, where they are already a leading cause of mortality.[1] Clear evidence exists for the best way of managing these diseases to reduce patient morbidity and mortality. The challenge is how to implement such management in a realistic way with limited resources, particularly targeting the most vulnerable patient groups such as poor and rural populations.

The only realistic place to manage chronic disease is in the primary care setting, as the sheer numbers of patients involved and the need for regular consultations over many years make it impossible to do anywhere else, so it is a key responsibility of all General Practitioners. Chronic disease management can be defined as 'an integrated approach to healthcare delivery that seeks to improve health outcomes and reduce healthcare costs'[2]. For it to work effectively, the following four key elements need to be in place.

1. A means of identifying and proactively monitoring those suffering from chronic diseases.

This means creating disease registers for the patients with chronic diseases that you are managing. This is relatively easy to do if you have a computer, but can be done with manual records also. There are two aspects to it – one is creating specific registers of all Hypertensives, all Diabetics etc which record basic contact details, date of last appointment and planned date of next appointment. An entry is made in the register each time the patient attends, and newly diagnosed patients details are added. Those who have defaulted to follow up can then be identified and potentially chased up (maybe via mobile phone number). Nurses and other paramedical staff can be trained to do this.

The second aspect is flagging the notes of patients with chronic diseases so it is obvious to anyone seeing them that they have the relevant disease, even if the patient has attended for another problem. This can simply be done using coloured stickers or markers (eg red for Hypertension, blue for Diabetes, Green for COPD etc). With computerised records there should be a clear entry on the main screen that shows the chronic disease the patient has. Then there is the opportunity to review the chronic disease management each time the patient attends, for whatever problem.

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2. Using management plans based on proven evidence based interventions.

Again there are two key things here. The first is following an up to date evidence based guideline for managing the disease. Guidelines change frequently as more evidence is produced, but internet access enables keeping up to date easily. Sites such as: http://www.who.int/rpc/guidelines/en/index.html; http://guidance.nice.org.uk/Topic; http://www.sign.ac.uk/guidelines/published/ are all useful for providing objective, updated, evidence based guidelines for a wide variety of conditions. You may need to adapt these for your own context, but by referring to the latest evidence you can be sure your management is as good as possible for the patient. It is helpful to produce a clear algorithm for managing the common chronic diseases that is easy to follow and accessible at all times where you are consulting (the published guidelines sometimes incorporate these).

The second aspect is designing and printing a record card that lists in tabular form all the relevant tests and medications that the patient requires regularly by date, and keeping it with the patient record (like an antenatal record card). So for example, Diabetic patients need a card listing: weight, blood pressure, smoking status, urinalysis for micro-albumin, glycosylated haemoglobin (if possible in your context), blood glucose, distal pulses, feet sensation and current medication etc, all completed with date of last check. Nurses are very good at monitoring and using such protocols and can carry out a lot of the follow up reviews of patients with chronic diseases if the patients have such cards. They may need to be updated if new evidence suggests a change in protocol is required – indeed all guidelines and protocols should be reviewed two yearly as a minimum.

3. Focusing on health education

In all chronic diseases health education is vital, and time spent with the patient explaining about necessary lifestyle changes such as stopping smoking, appropriate diet, weight loss if necessary, compliance with medication and 'what to do if..' is essential. Again nurses and other paramedical staff can do this, but often it is important that the doctor initiates such a dialogue with the patient as he/she may be seen as more authoritative, and a good relationship between patient and doctor will be important in enhancing patient compliance with advice and medication. In resource poor settings this is particularly important as patients may not be able to afford or access certain medications, so the lifestyle factors (which they *are* able to modify) are truly essential.

4. Using the whole team

As already inferred above, managing chronic diseases effectively cannot be done by doctors alone. To run a good chronic disease management system requires the cooperation of para-medical (eg clinical officers), nursing and clerical staff, all of whom need to understand what the aim is. Nurses and clinical officers can follow up and monitor patients using the record cards and algorithms described above. Clerical staff can keep the disease registers up to date and attempt to contact patients who've defaulted to follow up. Village health workers can help provide understandable health education. In this way an effective chronic disease management programme can be run from the health centre, clinic or hospital where the General Practitioner is based.

CONCLUSION

The burden of chronic disease in developing countries is already a major cause of mortality and will continue to increase in future. It has been clearly shown that good management of these diseases can reduce patient morbidity and mortality significantly. The only realistic setting to do this is in primary care, so all General Practitioners must take on the challenge of managing chronic diseases. This can be done by identifying and monitoring the patients with chronic diseases, using management plans based on evidence-based guidelines, focusing on health education, and using the whole primary health care team.

REFERENCES

1. D Yach, C Hawkes, CL Gould. The global burden of chronic diseases.

   JAMA. 2004; 291(21):2616-2622**,**

2. Faxon DP, et al. Improving Quality of Care Through Disease Management: Principles and Recommendations From the American Heart Association's Expert Panel on Disease Management. *Circulation.* Jun 2004; 109: 2651 - 2654.