

Non medical  
independent  
supplementary  
prescribers nursing  
essay



**ASSIGN  
BUSTER**

The purpose of this essay is to explore some of the processes involved in prescribing, from consideration of the patients pathophysiology, through consultation and decision-making to the provision of treatment. The author's rationale for choosing anticoagulation as the topic for discussion, is that although the author's field of practice is mainly with patients who have ischaemic heart disease, upon reviewing the practice log it became apparent that developments within the author's role were leading the author to participate more in the care of patients with atrial fibrillation.

To highlight discussion and link theory to practice the author will use four case studies of patients admitted to a district general hospital, who subsequently were diagnosed with atrial fibrillation and due to the nature of the condition, were offered anticoagulation for the prevention of future thromboembolic events. The above processes will be discussed under the headings of the learning outcomes below.

**Evaluate effective history taking, assessment and consultation skills with patients/ clients, parents and carers to inform working/differential diagnoses.**

**Integrate a shared approach to decision making taking account of patients/carers wishes, values,**

**Religion or culture.**

Traditionally patient consultations have been performed with the doctors taking the more dominant role (Lloyd & Bor 2009). These consultations have been doctor-centred, establishing a diagnosis and treatment plan without involving the patient in the decision making process. At this time this was accepted by the patient because ' the doctor knows best' and the patient

handed over responsibility for his well-being to the clinician. However this has now changed and patients are more interested in their illnesses, wanting to know more and be involved in their treatment plans. Increasing evidence suggests that a more patient-centred style of consultation results in happier patients who are more likely to adhere to their treatment plans (Stewart et al 2003).

The author was able to observe her designated medical practitioner (DMP) in a variety of patient interactions but mainly during the process of consultation, for the purpose of establishing diagnosis and treatment plans, (see appendix for case studies). Consultations are made up of a number of elements such as establishing a rapport, gathering and interpreting information and physical examination, however the cornerstone of all patient interactions is effective communication.

Prior to each consultation, the DMP prepared by reading through the medical records to obtain information regarding the patient's past and present history, medications and allergies. At this stage consideration was given to potential treatment plans or required tests. The patients in case studies 1-4 were all admitted to hospital due to either new onset of symptoms or deteriorating clinical condition, thus each consultation was held at the bedside. Hastings (2006) highlighted the importance of recognising the different settings within which a consultation can occur and how these settings can affect the patient and practitioner. This is a view shared by White (2002) who felt that the environment can greatly influence the consultation process.

Upon reviewing the literature the author has found that there are many different approaches that can be adopted and various consultation models that can be utilised, in order to produce the most effective consultation. The author felt that the DMP's methods of consultation spanned several models. It incorporated elements of the biomedical model described by Byrne & Long (1976), in which they describe six phases which formed a logical structure, but take a very doctor-centred approach (see appendix). Charlton (2007) argues however, that whilst this model is simplistic and logical it has difficulty accommodating the feelings, beliefs and psychosocial issues which colour the meaning of health and illness. The consultations also incorporated elements of the more patient-centred models as described by Pendleton et al (2003) and Calgary-Cambridge (1996), see appendix \*&\*. These models aim to achieve a collaborative understanding of the patient's problems. The author's DMP combined traditional methods of history taking with systematic physical enquiry and examination, to elicit information about the patient's medical, social and family histories, together with drug and allergy information, and the patient's perspective regarding their history and presentation of symptoms. Once the history was obtained the physical examination was performed to supplement the diagnostic process. In each case the examination was cardiovascular, paying particular attention to the auscultation of heart sounds, because in atrial fibrillation the exclusion of a valvular element is necessary prior to commencing anticoagulation.

In accordance with the models used, diagnosis was established and discussed with the patient. The DMP used simple terminology to ensure understanding. The use of non-verbal communication was evident

throughout each consultation, from the outset where introductions and shaking hands took place, to the use of empathy and touch when the patient showed fear and anxiety. The history taking process may have involved a doctor-centred approach but the discussion surrounding treatment choices was certainly patient-centred. In each consultation the plan between the patient and the DMP was negotiated, with the DMP explaining the risks associated with atrial fibrillation, and being honest with the patient about the risks versus benefits of anticoagulation. Charlton (2007) believes that it is important to elicit a patient's concerns and expectations in order to ensure that both the patient and the doctor's agendas are the same. This is supported by Neighbour (2005) who stated that, " Patients differ widely in their factual knowledge, in their beliefs, their attitudes, their habits, their opinions, their values, their self-images, their myths, taboos and traditions. Some of these are relatively labile and easy to change on a day to day basis, others are more firmly held and difficult to alter".

Each patient we encounter will have come from a different background and some from different cultural systems whereby their values, beliefs and behaviours may not be the same as the practitioners (Lloyd & Bor 2009). Each patient within the sphere of their culture or religion will have a different view about what treatments or care is acceptable (Helman 2000). This was the case in respect of patient \* who was a Jehovah's Witness. Patients who share this religion do not accept blood transfusions or blood related products based upon their interpretation of Acts, a book in the New Testament Bible (Wikipedia 2012).

Although the author's DMP and the patient were from different cultural and religious backgrounds, effective communication was still maintained. The DMP took time with the patient to explore the implications that the patient's beliefs would have upon the form of treatment that was indicated. In this case it was not taking the drug that posed the problem but the increased risk of bleeding that could occur, which potentially may require a blood transfusion if the bleeding were to be severe. In the case of patient \* they initially were not keen to start warfarin. When it was first mentioned the patient grimaced and said " oh, isn't that rat poison". Indeed the patient was correct, Warfarin has previously been used to kill rodents but its safety and efficacy as a medication has also been proven. Patients often have misconceptions about medication which can influence their decision making. Their decisions regarding treatments are based upon their understandings and these can often be influenced by external factors such as the media. However, with regard to the consultations observed by the author, it seems that the intrinsic factors were more influential. Patient \* and \* were both concerned about potential lifestyle changes. " How often would i need to come for tests? What about going on holiday? Will I bruise easily? What happens if I cut myself? Will it affect my other medicines". For patient \* the answers were acceptable and warfarin was prescribed. However patient \* felt that the change would be too much and declined. Respecting a patient's right to refuse treatment is part of the consultation and prescribing process. In its guidance on consent, the GMC (2008) discusses the importance of accepting that a competent patient has the right to make decisions about their healthcare and that doctors must respect these decisions, even if they do not agree with them. This view is supported by NICE (2009) who state <https://assignbuster.com/non-medical-independent-supplementary-prescribers-nursing-essay/>

that patient's if they chose to, should be involved in the decision making process, and as long as they have mental capacity, as defined in the Mental Capacity Act (2005), to be able to make informed choices, as professionals we must understand that patients have different views to us about risks and benefits and we must accept their right to refuse.

For patient's \*\*\*and \*, the recommended treatment was anticoagulation. Patient \* and \* once their initial concerns were addressed, were happy to proceed with the treatment. Patient's \* and \* were not. The author noted that this did not change the DMP's treatment of the patient, who respected their decision and agreed an alternative plan.

Although each consultation was different in the patient specifics, there were still common elements. Each interaction was structured and was systematic in establishing the required elements. A good rapport was established with each patient, resulting in effective communication. Communication problems between the doctor and patient can lead to dissatisfaction (Simpson et al 1991), causing misunderstandings and lack of agreement or concordance with treatment plans (Barry et al 2000). This was not the case however in patient \* and \*. Each patient was given a full explanation of the treatment options and each made an informed choice regarding their treatment, choosing to pursue a path not recommended by the author's DMP. A review by Cox (2004) summarised that patients and health care professionals need to have a two way discussion in order to share their views and concerns regarding treatment.

## **6. Integrate and apply knowledge of drug actions in relation to pathophysiology of the condition being treated.**

With the advent of independent and supplementary prescribing, and the ever changing role of the nurse, it is considered imperative that nurses have a greater knowledge and understanding of drug pharmacology (Thomas & Young 2008). Pharmacokinetics studies how our bodies process drugs and Pharmacodynamics studies how these drugs exert their effect (Greenstein & Gould 2009).

When the heart beats normally, a regular electrical impulse causes the muscular heart walls to contract and force blood out and around the body. This impulse originates in the top chambers of the heart (atria) and is conducted to the bottom chambers (ventricles). In atrial fibrillation this impulse is initiated and conducted in a random uncoordinated manner causing the heart to function less efficiently. The risk of a 'pooling' or 'stasis' of blood remaining in the heart, increases the risk for a thromboembolic event. Atrial fibrillation is the most commonly sustained cardiac arrhythmia affecting 10% of men over 75 years (NHS Choices 2013) and if left untreated is a significant risk factor for stroke (NICE 2006).

The patients identified in the case studies were all given a diagnosis of non-valvular atrial fibrillation. Their individual risk for thromboembolic event was assessed using the CHAD scoring systems and the outcome was that each patient required treatment with anticoagulation.

Anticoagulants were discovered in the 1920's by a Canadian vet who found that cattle eating mouldy silage made from sweet clover were dying of



haemorrhagic disease, and it wasn't until the 1950's that anticoagulants were found to be effective for preventing thrombosis and emboli by reducing clot formation, and were finally licenced for use as medicines. (Wikipedia 2012). Warfarin is the anticoagulant most commonly used in the treatment of atrial fibrillation. To understand the pharmacodynamics of warfarin, one must first understand the basic clotting cascade.

Blood contains clotting factors (inactive proteins) which activate sequentially following vascular damage. These factors form two pathways (Intrinsic and Extrinsic) which lead to the formation of a fibrin clot. The extrinsic pathway is triggered by tissue damage from outside of the blood vessel. It acts to clot blood that has escaped from the vessel into the tissues. Damage to the tissues activates 'tissue thromboplastin' which is an enzyme that activates 'Factor X'. The intrinsic pathway is triggered by elements that lie within the blood itself. Damage to the vessel wall stimulates the cascade of individual clotting factors which also activate Factor X. Once activated Factor X converts Prothrombin to Thrombin which in turn converts Fibrinogen to Fibrin. Fibrin fibres then form a meshwork which traps red blood cells and platelets and so stems the flow of blood (Doohan 1999). Vitamin K is essential for the maturation of clotting factors such as Factor X and prothrombin and it is on Vitamin K that anticoagulants such as Warfarin take effect. Warfarin reduces coagulation by inhibiting the processing of Vitamin K. This reduces the amount of matured clotting factors available for the clotting cascade, causing clotting time to be prolonged (Melnikova 2009). This time frame can be measured by testing a patient's INR (International

Normalised Ratio), which is simply a recording of the amount of time it takes for a blood sample to clot.

Using Warfarin in the treatment of Atrial Fibrillation, reduces the risk of clot formation and the risk of potential clots being ejected from the heart into the general circulation. This process however is dependent upon how the body initially processes the drug (pharmacokinetics). Warfarin is readily absorbed from the GI tract, however this can be affected by age related changes such as reduced gastric emptying and slowed motility affecting intestinal transit time. This phase determines a drug's bioavailability. The extent of drug distribution depends on the amount of plasma proteins and whether a drug is 'bound' or 'unbound'. Warfarin is 99% bound to plasma proteins and therefore takes longer to reach the site of action, thus the distribution phase lasts approximately 6-12 hours (Holford 1986). The patient in case \* was noted to be on aspirin. Patients on drugs which bind at the same site can cause problems when administered together, as one displaces the other causing elevated levels of the drug to be circulating, leading to toxicity (Sunalin 2011).

Whilst the benefits of warfarin are apparent the side effects and precautions for use are numerous. Warfarin has a narrow therapeutic window making control difficult and increases the risk of bleeding and haemorrhage. It interacts with other prescribed, over the counter and herbal medicines and is contraindicated in pregnancy. Despite its use in clinical practice for over 50 years, the MHRA still receive a substantial number of adverse reaction case reports through the 'Yellow Card' system. The majority of these reports were as a result of over anticoagulation with the majority of fatal cases being

<https://assignbuster.com/non-medical-independent-supplementary-prescribers-nursing-essay/>

attributed to haemorrhage. It was concluded that in some cases interaction with other medications was the cause (MHRA 2009). It is therefore essential that a full drug history including allergies is taken prior to commencing any new medication.

## **Critically appraise sources of information/advice and decision support systems in prescribing practice and apply the principles of evidence based practice to decision making.**

### **9. Demonstrate an expert understanding of prescribing decisions made within an ethical framework with due consideration for equality and diversity.**

The decision to prescribe an anticoagulant such as warfarin is not a decision taken lightly. Due to the potential side effects, mainly the increased risk of bleeding, the risks versus benefits discussion must be explored. The benefit of warfarin is the reduction in risk of thromboembolic events such as a stroke or pulmonary embolism, the risks are...however before this discussion can take place, it must first be established whether anticoagulation with warfarin is needed or whether an alternative treatment is possible.

In 1994 the Atrial Fibrillation Investigators (AFL), conducted randomised clinical trials whose participants had untreated atrial fibrillation. Data from these trials showed that patients with previous stroke, hypertension or diabetes were at increased risk of stroke. This data was confirmed by the Stroke Prevention & Atrial Fibrillation Investigators (SPAF 1995) who looked at thromboembolic risk for AF patients on aspirin. The amalgamation of these two bodies in 2001 led to the development of the CHAD2 scheme (see appendix), which is a clinical prediction tool used for estimating the risk of

stroke in patients with AF and to determine whether or not treatment is required with anticoagulant or antiplatelet therapy. Risk stratification schemes that accurately and reliably stratify stroke risk could influence the management of those who have AF and spare those low-risk patients the risks, inconvenience and costs associated with anticoagulation therapy (Gage et al 2004). The use of the CHAD<sub>2</sub> and CHAD<sub>2</sub>VASc score is advocated in the European Society of Cardiology (ESC) guidelines (2010), which recommends that if the patient has a CHAD score of 2 or above anticoagulation therapy such as warfarin or one of the newer drugs, such as dabigatran, should be prescribed. This view is supported by NICE guidance (2006) which analysed respective trials and concluded that warfarin significantly reduced the incidence of stroke and other vascular events in people with AF. NICE also discusses stroke risk stratification models, of which the CHAD<sub>2</sub> score is one. It does not however make recommendations as to the best choice of tool. Patient \* was the only one out of the case studies that had their stroke risk calculated using the CHAD scoring system and had it recorded in the notes. The reasons for this are unknown however the author hypothesises that perhaps as the other patients had greater apparent risk due to their existing co-morbidities, it was deemed unnecessary to actually perform the calculation as anticoagulation would ultimately be indicated. The author could argue here that if this was the case this generalisation goes against the concept of diversity.

Warfarin has been widely accepted as the drug of choice for oral anticoagulant therapy, however newer drugs on the market such as dabigatran and rivaroxban have also been recommended as alternatives to

warfarin , yet it is the author's experience that these are very rarely discussed with patients as alternative treatment and only seem to be prescribed when warfarin is not an option. The author believes the reason for this may be partly due to economic and geographical inequalities in health, a view shared by Abraham & Marcy (2012) & Wartak & Bartholomew (2011). They concluded that compared to warfarin dabigatran was disadvantaged by the lack of knowledge about its use, its poor gastrointestinal tolerability and ultimately the cost which resulted in its limited use.

Treatment decisions made for these patients were in keeping with National and European guidelines promoting access to treatment for all. Local guidelines however are under current review and were not available for scrutiny. As prescribers we must use all available information to ensure that we make the best evidence based prescribing decisions with our patients. Guidelines facilitate best practice but resources such as the British National Formulary (BNF) and the Electronic Medicines Compendium (EMC) are invaluable reference tools in facilitating best prescribing practice.

In everyday practice healthcare professionals are expected to make judgements about what is best for their patients. The NMC (nmc) advocate that to practice in an ethically sound manner it is necessary to balance ethical considerations with professional values and relevant legislation. The ethical theory of principlism described by Beauchamp & Childress (2008) considers the principles of beneficence, non-maleficence, autonomy and justice as the elements of ethical theory that are the most compatible in supporting decision-making within the healthcare system. Making ethical prescribing decisions is not a solitary activity, especially when the decision

<https://assignbuster.com/non-medical-independent-supplementary-prescribers-nursing-essay/>

will impact upon another person. The ethos of quality patient care relies upon a team approach that supports the decision making of the patient, in partnership with the professionals, ensuring that the values and beliefs of the patient have been respected and acknowledged.

## **5. Demonstrate critical awareness of the roles and relationships of others involved in prescribing, supplying and administering medicines.**

Earlier discussion highlighted the importance of communication in developing the doctor-patient relationship and how consultations are either doctor or patient-centred. This is also true with regard to other 'professional relationships' the patient may have with members of the multidisciplinary team, who are also involved in prescribing, supplying and administering their medications. A review of the supply, prescribing and administration of medicines by the DOH (1999), recommended that there should be two types of prescriber; independent and supplementary. An independent prescriber is "responsible and accountable for the assessment of patients with undiagnosed or diagnosed conditions and for decisions about the clinical management required.... supplementary prescribing is a voluntary partnership between a doctor or dentist and a supplementary prescriber to prescribe within an agreed patient specific clinical management plan, with the patient's agreement" NPC (2012).

As a potential non-medical prescriber the author recognises the importance in understanding and applying the principles of good prescribing practice, in order to become an independent/supplementary prescriber. Doctors undertake training in prescribing as part of their undergraduate programme

<https://assignbuster.com/non-medical-independent-supplementary-prescribers-nursing-essay/>

and are required to demonstrate this activity in order to obtain their registration. Their practice is guided and governed by the General Medical Council (GMC). Likewise nurses and midwives who are independent/supplementary prescribers, are governed by the Nursing and Midwifery Council (NMC), whose regulatory standards and legislation require practitioners to be experienced before they undertake such training and in safeguarding the best interests of the patient, ensure that nurses and midwives remain up to date with the knowledge and skills that enable them to prescribe and administer drugs safely and effectively (NMC 2004, NPC 2012). Pharmacist's whose governing body, the General Pharmaceutical Council (GPC 2010), allow that a pharmacist independent prescriber may, after successful completion of an accredited course, prescribe autonomously for any condition within their clinical competence. Current legislation however only allows other multidisciplinary members such as radiographers and physiotherapists to be supplementary prescribers.

During a patient's stay in hospital, it is most likely they will enter into a medication consultation with at least one or two of the multidisciplinary members mentioned above. All the patients in the case studies had contact with a doctor, nurse and pharmacist. The doctors performed the initial consult at the patient's admission and it is here that the initial drug history was taken. The nurse then administered the medication prescribed on the drug chart, giving the patient's information about the drugs they were taking and potential side effects. This information was limited to their individual knowledge base. If the drug was unavailable then it was requested from the pharmacy department. The author observed the practice that occurred when

an unavailable drug was requested. The initial process was simple, the doctor prescribed it and the ward nurse sent the drug chart and request slip to pharmacy. Once in pharmacy the process became more complex requiring the request to pass through several 'stations' before being dispensed. Prior to this course the author had very little understanding as to how important the role of the pharmacist was. Pharmacists play an important role in improving a patient's medication management during admission and through transitions of care from hospital to home. Weiss (2013) agreed that patients are often discharged from hospital with changes from their previous medication regimes, causing discrepancies and lack of understanding, which lead to non-adherence and adverse drug effects. The pharmacists spoken with by the author agreed that providing medication counselling in preparation for discharge is a large part of their role.

Patient \* and \* who were commenced on warfarin, received counselling prior to discharge. The author was able to observe this practice. The session took place at the bedside which, upon reflection, was not conducive to this information exchange. Noise and interruptions from a confused patient in the next bed meant that the passage of information was often disrupted and had to be repeated. The pharmacist provided the patient with an information pack and discussed the drug, side effects, anticoagulant monitoring and lifestyle changes such as travel, diet, recreational activities and dental visits. NICE medicines adherence guidance (2009) advocate the importance of providing patients with both written and verbal information in order to make an informed choice. For patient \* and \*, verbal information was given prior to prescription, but the written information was only provided after the patient



had agreed to treatment. Providing all the information beforehand could increase patient consent to treatment (Elwyn et al 2006).

Considering the role of others within the prescribing team has led the author to examine and reflect upon her own role. The author entered this course with knowledge and competence in diagnosing a patient with an acute coronary syndrome and questioned why such a broad prescribing knowledge was necessary. It is the view of Lymn et al (2010) that non-medical prescribers within a narrow specialist field often ask this question. Taylor & Field (2007) believe the answer to be because advancements in medicine have meant that patients are often able to live with chronic disease and multiple co-morbidities. Becoming a prescribing student has given the author insight into what she did not know and what she never realised she needed to know.

Conclusion.

At the beginning the author posed the question, " Anticoagulate or not to anticoagulate?" In order to answer this, the author explored some of the processes involved in prescribing and through the use of case histories, linked theory to practice with analytical discussion. The answer to the question is clear, there is no one true answer. It is the author's conclusion that each case for anticoagulation must be viewed separately. Each patient is different, their understanding, their views and their pathophysiology all are unique. As practitioners it is our duty to provide our patients with the information and support they need in order to make informed choices. As prescribing practitioners these responsibilities are increased. Using the

process of accountable practice as described by Lymn et al (2010), it is essential that we analyse our responsibilities as accountable prescribers and in doing so consider each prescribing situation on its own merits.