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Developing an individualised pharmaceutical care plan – How can this be achieved by the hospital pharmacist?

European Association of Hospital Pharmacists
Student Symposium
2017

Dr Antonella Tonna
Dr Scott Cunningham
Dr Ruth Edwards

Programme Outline

- 2:00 – 2:30pm
  Introductions 

- 2:30 – 3:45pm
  What is Pharmaceutical Care all about… 
- 3:45 – 4:15pm
  Coffee Break 
- 4:15 – 5:45pm
  Hands on care planning 
- 5:45 – 6:00pm
  Concluding discussion

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Who we are

Dr Scott Cunningham

Senior Lecturer & Teaching Group Leader for Clinical Pharmacy & Pharmacy Practice

PhD, BSc (Hons), PgDip, MRPharmS, FFRPS

Dr Antonella Tonna

Lecturer in Clinical Pharmacy

PhD, BPharm (Hons), MSc, MRPharmS, MFRPSII

Dr Ruth Edwards

Senior Lecturer & MPharm Course Leader

EdD, BSc (Hons), PgCert, MSc, SFHEA, FFRPS, MRPharmS

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Disclosure of Relevant Financial Relationships

- Nothing to declare

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Where we are from …

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Aberdeen in the sunshine …

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Aberdeen in the winter …




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Our new campus …




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Learning Outcome

- At the end of the workshop, participants will be familiar with the application of the systematic approach in formulating an individualised care plan

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Interactive questions Yes or No ?

1) Pharmaceutical care was introduced in the US by Hepler and Strand, way back in 1990.

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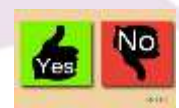
Interactive questions Yes or No ?

2) Pharmaceutical care can only be delivered if there is access to patient notes.



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Why Pharmaceutical Care?

Changing emphasis of service provision

- risk management / quality
- economy
- safe, effective & rational drug use
- more patient focussed and less supply focussed
- ALL lead to CLINICAL PHARMACY

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Clinical Pharmacy …….

- since 1960s – pharmacist leaving dispensary and going to ward
- patient focus
- knowledge, skills & attitudes
- NO PROCESS

NO PROCESS until…….

- Hepler C & Strand L, Opportunities and Responsibilities in Pharmaceutical Care, AJHP, 1990;47:533-543

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Hepler & Strand

Definition of Pharmaceutical Care:

- *"….**responsible** provision of drug therapy for the purpose of achieving **definite outcomes** that improve a patient's **quality of life**."*

Outcomes:

-
-
-
-

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So Pharmaceutical Care .....

- describes a systematic PROCESS
- is patient focussed
- calls for professional responsibility for actions / advice
- defines outcomes to be achieved

So, more robust, professional philosophy of practice

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Hepler & Strand Process

- Pharmacist co-operates with: patient & other professionals to design, implement and monitor a therapeutic plan

- Identify potential / actual drug related problems (DRPs)
- resolve actual DRPs
- prevent potential DRPs

- **….regardless of setting**

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Drug related problems

Activity 1

What FIVE (or six perhaps !) things need to be 'RIGHT' and be checked to ensure safe and appropriate drug administration to individual patients?

-
-
-
-
-

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Drug related problems

Hepler & Strand…….

- Untreated indication
- Improper drug selection
- Subtherapeutic dosage
- Failure to receive drugs
- Overdosage
- Drug interactions
- Drug use with no indications

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In Scotland….

A recognition that different models/ variations of PC….
Documents in response to this

- **Clinical Pharmacy in the hospital service: a framework for practice, HMSO 1996**
- **Clinical Pharmacy practice in primary care, HMSO 1999**
- Both describe SYSTEMATIC APPROACH TO PRACTICE similar to Hepler & Strand's

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Prescription for Excellence

- Scottish 'Vision and Action Plan' for pharmacy
- 'Pharmaceutical care is a key component of safe and effective healthcare.' Bill Scott, formerly Chief Pharmaceutical Officer.

RoseMarie Parr, CPO from 2015

http://www.scotland.gov.uk/Resource/0043/00434053.pdf

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Systematic Approach

1. **Gather patient information**
2. **Identify problems** (needs for drug / pharmacy service)
3. **Prioritise problems**
4. **Relate problems to medicines**
5. **Define goals for problems**
6. **Synthesise care plan - care issues / actions**
7. **Implement care plan**

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1. Gather patient info.

Activity 2

- List SOURCES of information that may be used to gather patient information for a care plan.

  Consider advantages and disadvantages of each.

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2. Identify Problems

- Patient need that requires medicine or a pharmacy service/intervention
- Symptoms / signs / abnormal results
- Disease states
- Other factors:
  - social habits (smoking/alcohol)
  - low intelligence
  - confusion
  - history poor compliance
  - inability to swallow
  - previous ADR
  - social circumstances

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3. Prioritise problems

- Active or Inactive

For ACTIVE consider:

-
-
-

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4. Relate problems to drugs

e.g in a table – giving a handy overview:

Problem	Previous drug	Current drug
Atrial Fib.		Warfarin 5mg daily
High Cholesterol		Simvastatin 40mg daily
Indigestion		??
???		Amlodipine 5mg daily

- problem - problem links
- problem - drug links
- drug - drug interactions
- untreated problems
- drug use - no indication
- knowledge of previous drugs may help guide actions

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5. Define goals

- cure of disease
- elimination / reduction in symptoms
- arresting / slowing of disease process
- preventing disease / symptoms

Also:

- minimise side-effects
- improve quality of life
- prolong life

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6. Synthesise care plan

Pharmaceutical Care Issues

- untreated indication
- improper selection
- sub-therapeutic dose
- overdose
- failure to receive appropriately
- ADR
- medicine interaction
- medicine use / no indication
- duplication of therapy
- monitoring need
- counselling need
- seamless care need

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Pharmaceutical Care Issues - digging deeper !!!

- Improper selection
  - not evidence based
  - contra-indication
  - lack of efficacy
  - caution
  - duration etc
- Failure to receive appropriately
  - compliance issues
  - administration issues - formulation, route, devices etc
  - frequency / timing inappropriate
- Medicine interaction
  - medicine - medicine
  - medicine - food (inc. alcohol/smoking)
  - medicine - laboratory

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6. Synthesise care plan

Actions

- changes
- monitoring
- counselling
- seamless care

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7. Implement care plan

- Manage the care issues i.e.
  make recommendations to relevant healthcare professionals

- Paper based
- Verbal

- **BUILD IN PLANS FOR FOLLOW UP**

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Documentation

- Very important
- Part of PROCESS
- Medico-legal reasons (responsibility)
- NB: Data protection / confidentiality
- Tool for peer review and audit

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Summary

Pharmaceutical Care:

- describes a systematic PROCESS
- is patient focussed
- calls for professional responsibility for actions / advice
- defines outcomes to be achieved
- So, more robust, professional philosophy of practice

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- Which statement A-D provides the BEST answer to each of the question or statement?

- Marking - correct on:

- First attempt scratch = 4 points
- Second attempt scratch = 2 points
- Third attempt scratch = 1 point
- Fourth attempt scratch = 0 points

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QUESTION 1

The IDEAL role of the clinical pharmacist can best be described as:

A Generally poorly developed and lacking definition and coherency

B Involving patient focussed activities that lead to safe, effective and economic use of drugs

C A well researched and established role in all hospitals

D Involving only reviewing case notes and prescription records for patients to identify area for reduction in the drug spend

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QUESTION 1

B. Involving patient focussed activities that lead to safe, effective and economic use of drugs

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QUESTION 2

The Hepler and Strand paper from 1990 on pharmaceutical care:

A Still provides a clear vision for and definition of how pharmacists should practise clinical pharmacy

B Was intended to be a template for clinical practice that should be strictly applied

C Is out of date and not at all relevant to the modern practice of pharmacy

D Is clearly designed by and for hospital pharmacists being only relevant to their knowledge and skills base rather than practice.

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QUESTION 2

A. Still provides a clear vision for and definition of how pharmacists should practise clinical pharmacy

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QUESTION 3

The GREATEST advantage to patients of applying a systematic approach to the practice of pharmaceutical care is that:

A It helps identify gaps in pharmacists' knowledge and skills that can be detrimental to patient care.

B It enables pharmacists to quickly and easily build rapport with patients to enable rationalisation of their medicines

C It is a cost-effective way to use pharmacists' skills

D It provides clear steps that should be followed and so helps practitioners check that they practice to a high standard and are less likely to miss things.

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QUESTION 3

D. It provides clear steps that should be followed and so helps practitioners check that they practice to a high standard and are less likely to miss things.

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QUESTION 4

In gathering information for the purposes of pharmaceutical care planning:

A Patient medication records are usually very accurate and can be relied upon for continuation of prescribing when a patient is admitted to hospital.

B Case notes are the most important and only source of information

C Doing a drug history interview with patients should be an integral part of the process of pharmaceutical care

D One source of information about medicines is usually sufficient to determine accurately which medicines a patient is taking.

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QUESTION 4

C. Doing a drug history interview with patient should be an integral part of the process of pharmaceutical care

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QUESTION 5

The prioritisation of 'Problems' in pharmaceutical care is influenced by:

A The evidence base of drug use in particular conditions and guidelines linked to this
B A practitioner's own level of experience and competency within specific therapeutic areas
C The desire and wishes of the patient
D All of the above

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QUESTION 5

D. All of the above

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QUESTION 6

In the practice of pharmaceutical care the multi-disciplinary team (MDT) needs to:

A Agree clear and well defined goals for each patient to ensure everyone is working towards and achieving the best care for the individual patient

B Work only with professionals within their own discipline to review patients.

C Ensure patient safety by clearly defining their traditional roles and avoid extending beyond that

D Agree clear and well defined goals for each patient to avoid repeating the same tasks

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QUESTION 6

A. Agree clear and well defined goals for each patient to ensure everyone is working towards and achieving the best care for the individual patient

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QUESTION 7

The pharmaceutical care plan document:

A Is confidential to the patient and the practitioner that developed it and should not be used for any other purposes.

B Is a document that all practitioners should consider integrating into their practice for each patient reviewed

C Should always be in paper form with signatures of practitioner linked to each recommendation

D Is an essential component for medico-legal reasons related to the part of the definition of pharmaceutical care on 'taking responsibility'

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QUESTION 7

D. Is an essential component for medico-legal reasons related to the part of the definition of pharmaceutical care on 'taking responsibility'

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QUESTION 8

In relation to categories of pharmaceutical care issues:

A Identifying 'Monitoring Needs' is essential only when a patient is prescribed medications for a long period of time

B 'Counselling Need' only relates to situations when new medicines are prescribed

C If a patient was not taking a medicine as prescribed this would be an example of an issue in the category 'Failure to receive medicines appropriately'

D 'Seamless care' deals only with the transfer of information about medicines from secondary to primary care when the patient is being discharged

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QUESTION 8

C. If a patient was not taking a medicine as prescribed this would be an example of an issue in the category 'Failure to receive medicines appropriately'

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QUESTION 9

In relation to implementing the pharmaceutical care plan:

A Actions to resolve medication related care issues are undertaken only by the pharmacist

B Implementation should always involve follow up to determine the positive or negative consequences of recommendations

C Actions should always be provided in written form to other practitioners or the patient

D The care plan does not need to be updated or reviewed following implementation

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QUESTION 9

B. Implementation should always involve follow up to determine the positive or negative consequences of recommendations

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QUESTION 10

In the UK, for implementing actions linked to care plans:

A A Pharmacist Practitioner who is an independent prescriber is responsible for the assessment of the patient and making decisions about the clinical management of that patient, including prescribing medicines

B A Pharmacist Prescriber cannot prescribe controlled drugs such as morphine

C Pharmacist Independent Prescribers can only prescribe medicines if practising in a hospital environment

D Only pharmacists and medical doctors can prescribe – other healthcare professionals cannot.

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QUESTION 10

A. A Pharmacist Practitioner who is an independent prescriber is responsible for the assessment of the patient and making decisions about the clinical management of that patient, including prescribing medicines

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Annie Lennox – Interview

- Video needs to be embedded here

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Annie Lennox – Care plan

Medical problem	Care issue	Proposed action	Evidence
Infection – big toe	**Failure to receive medicines appropriately**: Patient still receiving flucloxacillin IV despite planning to send her home.	Change patient on to oral flucloxacillin 1g four times daily with view to being reviewed tomorrow by nurse. Ensure that blood glucose levels are controlled to aid in healing.	
	Pain relief	Determine whether patient requires to take any pain relief home e.g. paracetamol	
TIA – long term management	**Untreated indication**: Patient should be on antiplatelet agent due to ischaemic event.	Restart antiplatelet – clopidogrel 75mg daily (aspirin 75mg daily and dipyridamole 200mg MR twice daily if patient intolerant to clopidogrel) [Since clopidogrel not licensed in long-term management of TIA, there may be some conflicting recommendations. Some guidelines, such as NICE, recommend use of aspirin 75mg and dipyridamole 200mg daily as an alternative option].	Royal College of Physicians (RCP) National Clinical Guidelines for stroke (5th ed, 2016)
	Untreated indication: Hypercholesteraemia untreated. In ischaemic stroke treatment with statin indicated irrespective of cholesterol level	Initiate high intensity statin (e.g. atorvastatin 80mg)	RCP National Clinical Guidelines for stroke (5th ed, 2016)
	Failure to receive medicines appropriately: aspirin discontinued	As above (and counsel on compliance –see below)	

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	Monitoring need: cholesterol, triglycerides, Liver Function Tests + Blood pressure	Monitor BP (<130mmHg), cholesterol, TG (target ≤ 3.5mmol/l or as low as possible), LFT, muscle pain.	RCP National Clinical Guidelines for stroke (5th ed, 2016)
	Counselling need: drug changes, statin – muscle pain, diet/exercise,	Counsel on drug changes, statin – muscle pain, continuing therapy/compliance, lifestyle factors including diet, exercise (which may be a problem to her toe), alcohol intake	
	Seamless care need:	Ensure she can manage medicine containers due to weakness – e.g. use of clic-cloc; any issues with sight or deafness	
	Failure to receive medicines appropriately: Patient on co-tendione	All patients with previous stroke should be considered for ACEI (or angiotension receptor blocker) and regardless of BP. This is especially important in this patient who is diabetic. Start e.g. Ramipril 2.5mg with a view to titrating up. The addition of a calcium channel blocker may be considered if a second antihypertensive agent is required.	RCP National Clinical Guidelines for stroke (5th ed, 2016)

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Interactive questions Yes or No ?

1) **Pharmaceutical care was introduced in the US by Hepler and Strand, way back in 1990.**

YES

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Interactive questions Yes or No ?

2) **Pharmaceutical care can only be delivered if there is access to patient notes.**

NO

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