CHAPTER 5 - ARRANGEMENTS FOR THE PRESCRIPTION, ADMINISTRATION, REVIEW AND RECORDING OF MEDICINES

Police inquiry and expert witness reports

CHIs terms of reference for its investigation in part reflected those of the earlier inquiry by the police, whose reports were made available to CHI.

The police expert witnesses reviewed the care of five individual patients who died in 1998 and made general comments in the reports about the clinical leadership and arrangements for the management of patients on the wards. Their examination of the use of medicines in Daedalus, Dryad and Sultan wards, caused them to express concern about three drugs, the amounts which had been prescribed, the combinations in which they were used and the method of their delivery. A summary of those comments is as follows:

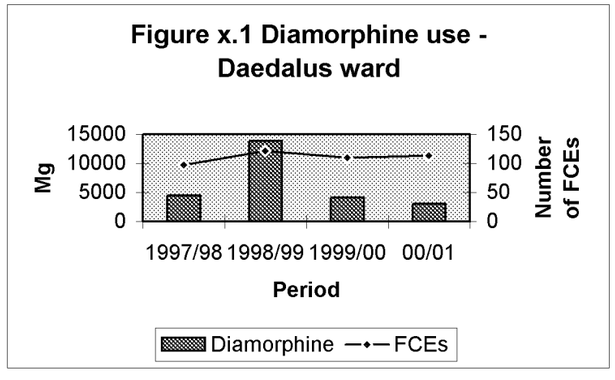
- there was inappropriate prescription and dose escalation of strong opiate analgesia as the initial response to pain. It was the view of the police expert witnesses that a more reasonable response would be to prescribe a mild to moderate medicine initially with appropriate review of any pain followed up
- there was inappropriate subcutaneous combined administration of diamorphine, midazolam and haloperidol, which could carry a risk of excessive sedation and respiratory depression in older patients, leading to death
- an assumption was made by clinical staff that patients had been admitted for palliative, rather than rehabilitative care
- there was a failure to recognise potential adverse effects of prescribed medicines by clinical staff
- clinical managers failed to routinely monitor and supervise care on the ward

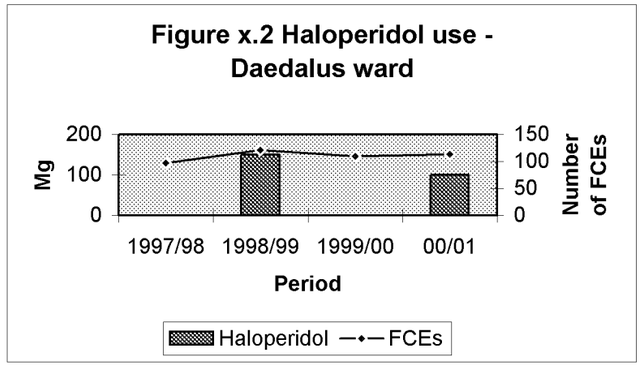
Medicine useage

In order to determine the levels of prescribing at the trust between 1998 and 2001, CHI requested a breakdown from the trust of usage of diamorphine, haloperidol and midazolam for Daedalus, Dryad and Sultan wards. Data was also requested on the method of drug delivery. Some of the medicines used in the care of older people can be delivered by a syringe driver, which delivers a continuous subcutaneous infusion (under the skin). This information has been plotted against the total number of admissions for the relevant year. The data relates only to medicines issued from the pharmacy and does not include any wastage, nor can it prove the amounts of medicines actually administered. A detailed breakdown of medicines for each ward is attached at appendix H.

The experts commissioned by the police had serious concern about the level of use of these three medicines (diamorphine, haloperidol and midazolam). CHI shares this view and believes the use and combination of medicines used in 1998 was excessive and outside normal practice. The following charts indicate the use of the respective medicines by ward and year, plotted alongside the number finished consultant episodes.

Medicine usage 1997/1998-2000/2001according to the number of finished consultant episodes per ward





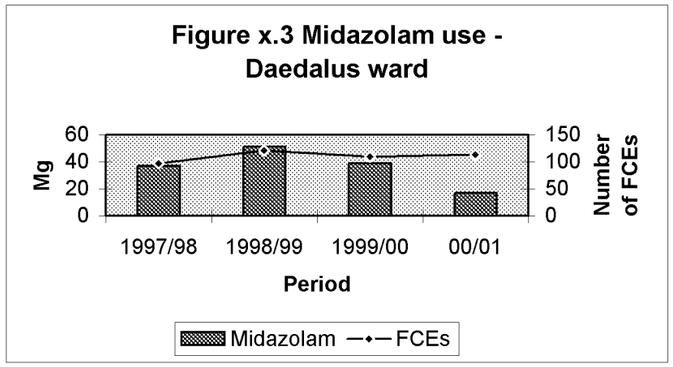


Figure x.3 Midazolam use -
Daedalus ward
Mg
60
40
20
0
150
100
50
0
Number of FCEs
1997/98
1998/99
1999/00
00/01
Period
Midazolam
FCEs

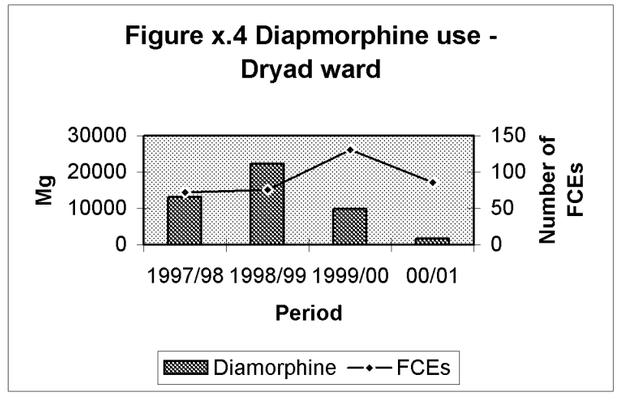


Figure x.4 Diapmorphine use -
Dryad ward
Mg
30000
20000
10000
0
150
100
50
0
Number of FCEs
1997/98
1998/99
1999/00
00/01
Period
Diamorphine
FCEs

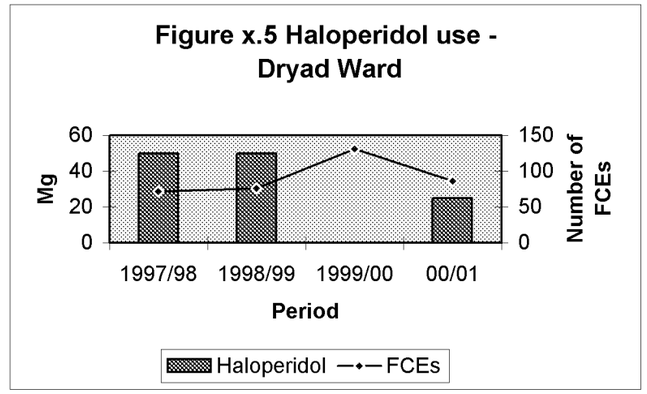


Figure x.5 Haloperidol use -
Dryad Ward
Mg
60
40
20
0
150
100
50
0
Number of FCEs
1997/98
1998/99
1999/00
00/01
Period
Haloperidol
FCEs

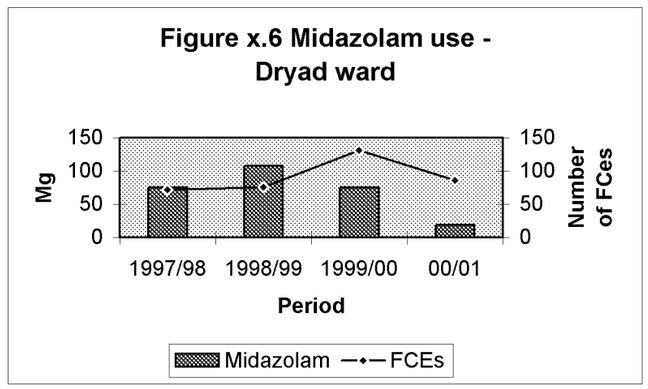
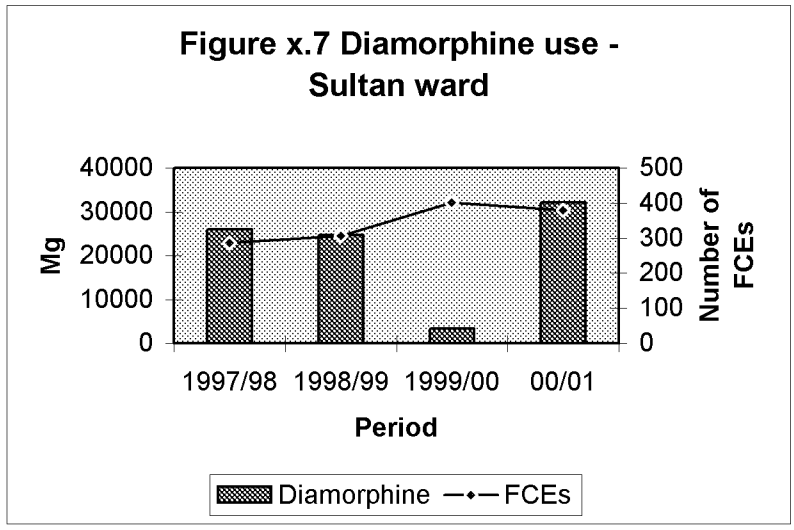
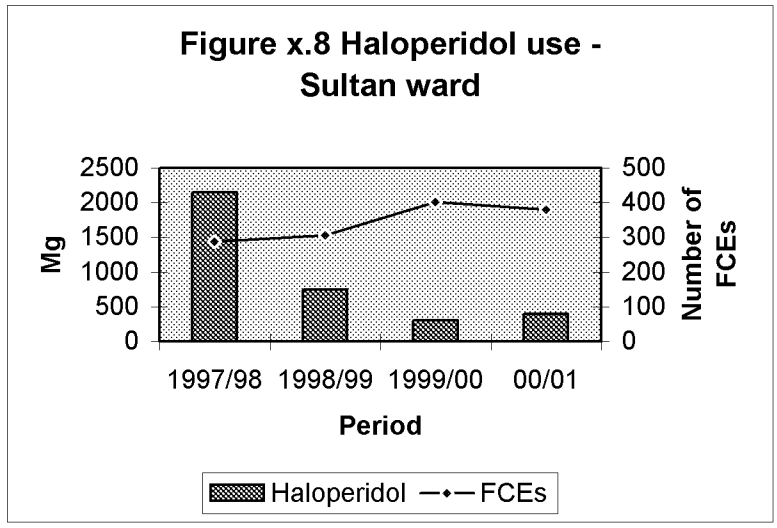
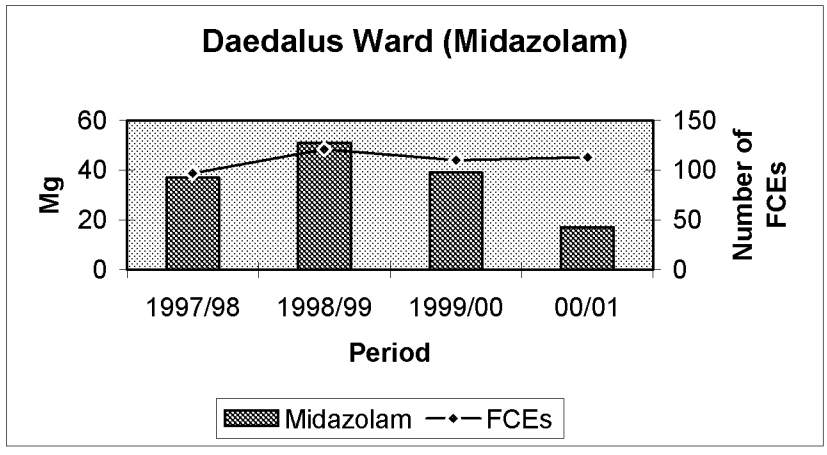


Figure x.6 Midazolam use -
Dryad ward
Mg
150
100
50
0
150
100
50
0
Number of FCes
1997/98
1998/99
1999/00
00/01
Period
Midazolam
FCEs



[where is midazolam chart for Sultan ward? Has last chart been wrongly titled?]





ASSESSMENT AND MANAGEMENT OF PAIN

The trust's policy for the assessment and management of pain was introduced in April 2001, in collaboration with Portsmouth Hospitals NHS Trust, and is due for review in 2003. The stated purpose of the document was to identify mechanisms to ensure that all patients have early and effective management of pain or distress. The policy places responsibility for ensuring that pain management standards are implemented in every clinical setting and sets out the following:

- the prescription must be written by medical staff following diagnosis of type(s) of pain and be appropriate given the current circumstances of the patient
- if the prescription states that medication is to be administered by continuous infusion (syringe driver) the rationale for this decision must be clearly documented
- all prescriptions for drugs administered via a syringe driver must be written on a prescription sheet designed for this purpose

CHI has also seen evidence of a pain management cycle chart and an 'analgesic ladder'. The analgesic ladder indicates the drug doses for different levels and types of pain, how to calculate opiate doses, gives advice on how to evaluate the effects of analgesia and how to observe for any side effects. Nurses interviewed by CHI demonstrated a good understanding of pain assessment tools and the progression up the analgesic ladder.

CHI was told by some nursing staff that following the introduction of the policy, it took longer for some patients to become pain free and that medical staff were apprehensive about prescribing diamorphine. Nurses also spoke of a reluctance of some patients to take pain relief. CHI's case note review concluded that two of the fifteen patients reviewed were not prescribed adequate pain relief for part of their stay in hospital.

Many staff interviewed referred to the Wessex palliative care guidelines, (explained in paragraph??) which are in general use on the wards. Although the section on pain focuses on patients with cancer, there is a clear highlighted statement in the guidelines that states "all pains have a significant psychological component, and fear, anxiety and depression will all lower the pain threshold".

The Wessex guidelines are comprehensive and include detail, in line with British National Formulary recommendations, *(need to check)* on the use, dosage, and side effects of drugs commonly used in a palliative care environment.

CHI's random case note review of fifteen recent admissions concluded that the pain assistance and management policy is being adhered to. CHI was told by staff of the previous practice of anticipatory prescribing of palliative opiates. As a result of the pain and assessment policy, this practice has now stopped. CHI understands that one of the people who initiated this change of practice was the staff grade physician appointed in September 2000, who, based on knowledge gained elsewhere, had expressed concern over the range of anticipatory doses being prescribed on the wards.

Prescription writing policy

This policy was produced jointly with the Portsmouth Hospitals NHS Trust in March 1998. The policy covers the purpose, scope, responsibilities and requirements for prescription writing, medicines administered at nurses' discretion and controlled drugs. A separate policy covers the administration of intravenous medicines.

The policy has a section on verbal orders. Telephone orders for single doses of medicines can be accepted over the telephone by a registered nurse if the doctor is unable to attend the ward. According to United Kingdom Central Council guidelines (October 2000), this is only acceptable where the, "the medication has been previously prescribed and the prescriber is unable to issue a new prescription. Where changes to the dose are considered necessary, the use of information technology (such as fax or email) is the preferred method. The UKCC suggests a maximum of 24 hours, in which a new prescription confirming the changes should be provided. In any event, the changes must have been authorised before the new dosage is administered."CHI understands that arrangements such as these are common practice in GP led wards and work well on the Sultan ward, with arrangements in place for GPs to sign the prescription within 12 hours. These arrangements were also confirmed by evidence found in CHI's case note review.

Administration of medication

Medication can be administered in a number of ways, for example, orally in tablet or liquid form, by injection and under the skin via a syringe driver. Guidance for staff on prescribing via syringe drivers is contained within the trust's policy for assessment and management of pain. The policy states that all prescriptions for continuous infusion must be written on a prescription sheet designed for this purpose.

Evidence from CHI's case note review demonstrated good documented examples of communication with both patients and relatives over medication and the use of syringe drivers.

Role of nurses in medicines administration

Registered nurses are regulated by the General Nursing Council, a new statutory body which replaced the United Kingdom Central Council on 1 April 2002. Registered nurses must work within their code of professional conduct (UKCC, June 1992). The scope of professional practice (UKCC, June 1992) clarified the way in which registered nurses are personally accountable for their own clinical practice and for care they provide to patients. The standards for the administration of medicines (UKCC, October 1992) details what is expected of nurses carrying out this function and every nurse should have a copy of the standards.

Underpinning all of the regulations that govern nursing practice, is the requirement that nurses act in the best interest of their patients at all times. This could include challenging the prescribing of other clinical staff.

Information provided by the trust indicates that only two qualified nurses from Sultan ward had taken part in a syringe driver course in 1999. Five nurses had also completed a drugs competencies course. No qualified nurses from Dryad or Deadalus ward had taken part in either course between 1998 and 2001. Some nursing and healthcare support staff spoke of receiving syringe driver information and training from a local hospice.

Review of medication

The regular ward rounds and multidisciplinary meetings should include a review of medication by senior staff, which is recorded in the patient's case notes. CHI recognises the complexity of the multidisciplinary meetings; the consultant has to process information from a variety of staff, engage in a dialogue to set and review goals and record the essence of this discussion in the case notes. The additional task of concurrently reading and amending the prescription chart, listening to the observations of staff about symptom and pain control and recording any medication changes makes the process yet more complex. Despite this, a process should be found to ensure that effective and regular reviews of patient medication take place

In November 1999, a Portsmouth Healthcare NHS Trust review of the use of neuroleptic medicines, which includes tranquillisers such as haloperidol, within all trust elderly care continuing care wards concluded that neuroleptic medicines were not being over prescribed. The same review revealed that "the weekly medical review of medication was not necessarily recorded in the medical notes". The findings of this audit and the accompanying action plan, which included guidance on completing the prescription chart correctly, was circulated to all staff on Daedalus and Dryad wards, including part time staff and the clinical assistant. A copy was not sent to Sultan ward. There was a reaudit in January 2000, when it was concluded that *??? (trust asked for copy)*

Structure of pharmacy

PORTSMOUTH HEALTHCARE NHS TRUST HAS A SERVICE LEVEL AGREEMENT FOR PHARMACY SERVICES WITH THE LOCAL ACUTE TRUST, PORTSMOUTH HOSPITALS NHS TRUST. THE CONTRACT IS MANAGED LOCALLY BY A GRADE E PHARMACIST AND THE SERVICE PROVIDED BY A SECOND PHARMACIST, WHO IS THE LEAD FOR OLDER PEOPLES SERVICES. PHARMACISTS SPEAKING TO CHI SPOKE OF A REMOTE RELATIONSHIP BETWEEN THE COMMUNITY HOSPITALS AND THE MAIN PHARMACY DEPARTMENT AT QUEEN ALEXANDRA HOSPITAL, TOGETHER WITH AN INCREASING WORKLOAD. PHARMACY STAFF WERE

CONFIDENT THE PHARMACIST WOULD CHALLENGE LARGE DOSES WRITTEN UP BY JUNIOR DOCTORS BUT STRESSED THE NEED FOR A COMPUTERISED SYSTEM WHICH WOULD ALLOW CLINICIAN SPECIFIC RECORDS. THERE ARE SOME RECENT PLANS TO USE THE TRUST INTRANET TO PROVIDE A COMPENDIUM OF DRUG THERAPY GUIDELINES, ALTHOUGH THE INTRANET IS NOT EASILY AVAILABLE TO ALL STAFF.

PHARMACY TRAINING FOR NON PHARMACY STAFF WAS DESCRIBED AS "TOTALLY INADEQUATE" AND NOT TAKEN SERIOUSLY. NOBODY KNEW OF ANY TRAINING OFFERED TO CLINICAL ASSISTANTS

Portsmouth Healthcare NHS Trust did not have any systems that could have alerted them to any unusual or excessive patterns of prescribing, although the prescribing data was available for analysis. [are there systems now, or could this still be a problem?]

KEY FINDINGS

- 1. CHI has serious concerns regarding the quantity, combination and lack of review of medicines prescribed to older people on Dryad and Deadalus wards in 1997/1998. This is based on the findings of police expert witnesses and pharmacy data provided for the wards.

  The data provided by Portsmouth Healthcare NHS Trust shows an increase in the amount of diamorphine, haloperidol and midazolam used on Daedalus ward in 1998. The quantity of diamorphine used is the most significant. The useage of all three drugs in recent years illustrates a decline, reinforced by trust staff interviewed by CHI and by CHI's own review of recent case notes. This should be seen against a slight rise in patient numbers.

  There has also been a decline in the usage of the three drugs on Dryad ward, although this is against a decline in finished consultant episodes.

  Sultan ward has experienced a rise in patient numbers, together with an increase in the use of diamorphine, haloperidol and midazolam. There has been a recent large increase in diamorphine used on the ward.

Nursing staff interviewed confirmed the decreased use of both diamorphine and the use of syringe drivers since 1998. CHI's review of recent case notes confirmed that prescribing levels of diamorphine, midazolam and haloperiodol has reduced substantially.

2. CHI welcomes the introduction and adherence to policies regarding the prescription, administration, review and recording of medicines. Although the palliative care Wessex guidelines refer to non physical symptoms of pain, the trust's policies do not include methods of non verbal pain assessment and rely on the patient articulating when they are in pain.

3. CHI found little evidence from the expert witness reports commissioned by the police to suggest that thorough whole patient assessments were being made by multidisciplinary teams in 1998.

4. Pharmacy support to the wards in 1998 was inadequate. CHI remains unconvinced that there are adequate systems in place to review and monitor prescribing at ward level.

RECOMMENDATIONS

1. The PCT should review the provision of pharmacy services to Dryad, Deadalus and Sultan wards, taking into account the change in casemix and use of these wards in recent years. Consideration should be given to including pharmacy input into regular ward rounds.
2. The PCT must review the introduction of IT to maintain records of prescribing.
3. The PCT, in conjunction with the pharmacy department, must ensure that all relevant staff are trained in the prescription, administration, review and recording of medicines