

Comparison of Pain Management at Teule Hospital, Muheza, Tanzania and Royal Glamorgan Hospital, South Wales, UK

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Introduction

Pain is a very distressing symptom that has been described as having a varying prevalence amongst hospitalized patients internationally. [1,2]

Principles of pain management described by the World Health Organisation (WHO) aim to ensure that pain is managed adequately throughout the world. If these principles are followed, it has been shown that pain relief can be achieved for 80% of patients. [3]

Whilst these principles are intended for international use, the different levels of health care facilities and resources available at individual hospitals worldwide, are likely to have an impact on the adequacy of pain management in different centres.

Objectives

- To compare the management of pain at Teule Hospital, Muheza, Tanzania, with the management of pain at Royal Glamorgan Hospital, South Wales, UK with respect to adherence to the WHO Principles for Pain Management.
- To recognise any cultural differences with regard to patient satisfaction with their analgesia.

WHO Principles of Pain Management

Analgesics should be given, where possible:

- By the oral route.
- At regular intervals.
- From the most appropriate step of the analgesic ladder.

Comparative Populations [4,5]

Teule (Tanzania)	Royal Glamorgan (UK)
<ul style="list-style-type: none"> 330 bed district general hospital. Located in Muheza, North East Tanzania. Area of 4922km² Population of 280,000. 90% of population living rurally. 	<ul style="list-style-type: none"> 570 bed district general hospital. Located in South East Wales. Population of 330 000 served between two acute hospitals within Cwm Taf Health Board. 13 miles from Cardiff in semi-rural area.

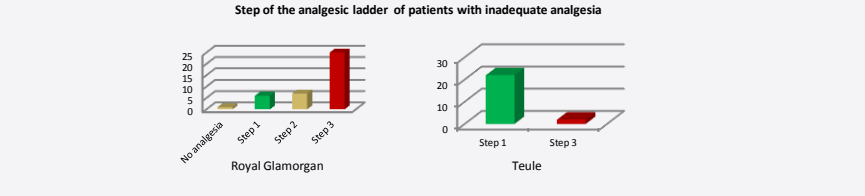
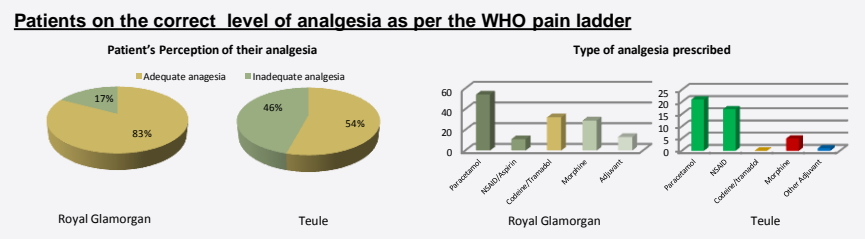
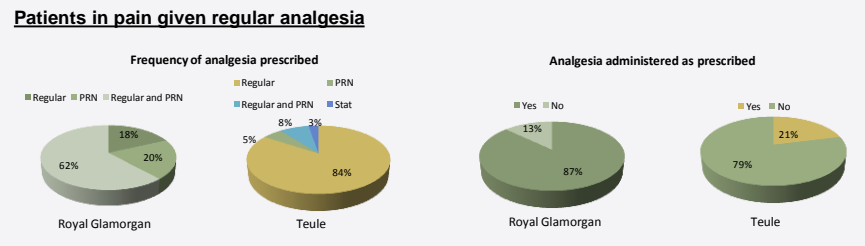
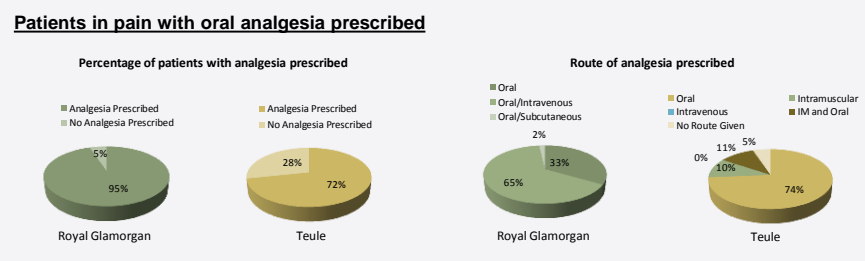
Methods

The data was collected from two medical and two surgical wards at each hospital over two consecutive days. The data was collected by the same clinician from all patients who were available on the ward, via their drug charts and through patient interviews.

- The data collected at Teule Hospital, Tanzania sampled 57 adult inpatients over a two day period in November 2012.
- The data collected at Royal Glamorgan Hospital, South Wales sampled 67 adult inpatients over a two day period in May 2014.

Results

Royal Glamorgan, UK	Teule, Tanzania
<ul style="list-style-type: none"> 58 patients included, 9 patients excluded. 9 female medical patients, 12 male medical patients. 20 female surgical patients, 17 male surgical patients. Mean age 69 years, range 32-92 years 	<ul style="list-style-type: none"> 53 patients included, 4 patients excluded. 14 female medical patients, 9 male medical patients. 17 female surgical patients, 13 male surgical patients. Mean 45 years, range 18-78 years



Discussion

Royal Glamorgan, UK	Teule, Tanzania
<ul style="list-style-type: none"> 95% of patients who had experienced pain had analgesia prescribed. 100% of those analgesic prescriptions were by the oral route. 82% of those analgesic prescriptions were at regular intervals. 87% of those analgesic prescriptions were administered as prescribed. 83% of patients in pain felt that their analgesia was adequate. Of those patients with inadequate analgesia, 25 were on step 3 of the ladder, 7 on step 2, 6 on step 1 and 1 patient did not have any analgesia prescribed. 	<ul style="list-style-type: none"> 72% of patients who had experienced pain had analgesia prescribed. 85% of those analgesic prescriptions were by the oral route. 92% of those analgesic prescriptions were at regular intervals. 21% of those analgesic prescriptions were administered as prescribed. 54% of patients in pain felt that their analgesia was adequate. Of those patients with inadequate analgesia, 2 were on step 3 of the ladder, and 22 were on step 1 of the ladder.

Potential reasons for differences observed:

- NHS funding in Royal Glamorgan Hospital and patient funding at Teule Hospital.
- Insufficient resources, including skilled health care workers, at Teule hospital.
- Recent drive to prescribe analgesics on prn basis at Royal Glamorgan Hospital.
- More paternalistic attitude towards healthcare at Teule hospital.
- Different health beliefs amongst patient populations.
- Stigma attached to morphine addiction and side effects at Teule.

Limitations

This was a subjective study with a small sample size. Whilst the data was collected by the same clinician, there was a period of 18 months between the data collection at the two hospitals.

Conclusions

- Pain management at Royal Glamorgan Hospital follows the WHO Principles of Pain Management to a greater extent than at Teule Hospital.
- Despite the limited resources at Teule, there are some successful elements of pain management, namely prescribing on a regular basis which was higher than at Royal Glamorgan Hospital.
- Morphine is under used at Teule hospital for patients with inadequate analgesia.

Recommendations

- Analgesia should be prescribed and administered in line with the WHO guidelines:
 - "By mouth, by the clock, by the ladder".
- All patients should be asked about pain on admission and on every ward round.
- Launch of a pain campaign at Teule to increase awareness of pain and its management as well as addressing the stigma attached to morphine
- Education sessions at Teule about prescribing appropriately.

Literature Cited

- [1] Strohbuecker et al. Pain Prevalence in Hospitalized Patients in a German University Teaching Hospital. *Journal of pain and symptom management*. 2005; 29(5)
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