# Palliative Care and the Syringe Driver



Is the use of the syringe driver an appropriate and effective method in relieving and managing symptoms such as pain in patients under palliative care?

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One of the foremost complications patients in palliative care experience is pain (Canser et al., 2014). Pain can be a significant burden for patients as well as their families, and caregivers. The introduction of the syringe driver transformed pain control, and increased patient comfort by avoiding the requirement of repeated injections (Gabriel, 2015). For individuals under palliative care who are unable to receive oral analgesia, the subcutaneous route can be an alternative, and effective option in delivering continuous medication(s) (Gabriel, 2015).

## **Benefits of the Syringe Driver**

- The syringe driver is continually infusing which helps maintain constant blood serum opioid levels, therefore improving pain relief (Costello et al., 2008).
- Enables patients to be cared for in their own homes with greater confidence (Costello et al., 2008).
- Ability that two or more medications can be mixed together (Thomas & Barclay, 2015).
- The syringe driver also aids in the physiological impact of the patient struggling to swallow their medication (Norton, 2014).

## Patient and Family Experience of the Syringe Driver

Overall Cruichshank et al. (2010) found that patients and their families, viewed the syringe driver as an opportunity to relieve and manage symptoms, and overall did not view the device itself as an added source of distress, or a problem. The introduction of the syringe driver to a patients care has been found to be associated with the opportunity to resolve a range of symptoms, and once the patients symptoms were under control it provided, and enhanced a sense of trust, confidence, and support between professionals and families (Cruichshank et al., 2010).

### Recommendations

- A significant effort needs to be made to appropriately discuss utilizing the syringe driver with patients, family members, and carers before implementation, as well as appropriate documentation made regarding the rationale for its use (Thomas & Barclay, 2015). This will help lessen any anxiety, and help form trust and understanding between the nurse, patient and the family
- Nurses need to receive adequate education around the syringe driver insertion site, as this will help prevent future site problems (Khan & Younger, 2007). Education around the use of the general use of the syringe driver is just as important, and recommending that nurses stay up to date with their training of a syringe driver will help decrease any incorrect set-up or usage of the device, as well as minimize medication mistakes (Thomas & Barclay, 2015).
- In regards to patient, and family education, a recommendation can be made that nurses need to ensure adequate education is given to the patient and the family about the syringe driver as this will help instill confidence, and independence in them (Norton, 2014).

### Conclusion

Evidence from the literature review resulted in the conclusion that use of the syringe driver is an appropriate and effective method in relieving, and managing symptoms such as pain in patients under palliative care. Evidence found that the majority of patient and family perceptions on the syringe driver was positive as it aided in relieving distressing symptoms of the patient, as well as the emotional and social aspect of the family (Norton, 2014). With appropriate efforts made in ensuring communication is sufficient, and nurses receive up to date education on the syringe driver as well as educating the patient and their family, the positive perceptions will continue to remain and improve, and the negative views resolve.

#### References

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#### Rationale:

The evidence based literature review on the appropriateness and either was of the syringe driver in palliative care is presented in a poster form. The decision to present the literature review in a poster form as a means of knowledge transfer was based on the advantages poster presentations possess. Evidence suggests that posters are an effective way to present and share research to others (Christenbery & Latham, 2013). They allow important content to be presented and the ability to emphasize certain points (Christenbery & Latham, 2013). Unlike some other forms of presenting information, posters allow the audience to view the information at their own pace, as well as allowing a number of individuals to view the poster at the same time (Berg, 2005). They provide the audience with a brief overview of the topic, and allow informal discussion between the author and the viewer to occur (Ilic & Rowe, 2015). The combination of delivering a poster, and the author being present for discussion can be more engaging, and promote active learning (Ilic & Rowe, 2015).

Overall presenting the information in poster form allowed for a concise overview of the syringe drivers in palliative care, focusing on the benefits of the syringe driver to the patient, their family and the nurse, as well as the patient views on the device, and highlighting recommendations to aid in increasing positive patient views surrounding the syringe driver.

Clinical question: Is the use of the syringe driver an appropriate, and effective method in relieving and managing symptoms such as pain in patients under palliative care?

The clinical question, is the use of the syringe driver an appropriate, and effective method in relieving and managing symptoms such as pain in patients under palliative care? originated from the practice issue surrounding pain in palliative patients and the method in which this was controlled and managed. Is oral analgesia or analgesia administered via a syringe driver more effective in relieving pain? A literature review was undertaken to identify the most current evidence regarding patient experience of the syringe driver and oral analgesia. The PICO/T model was used to help redefine the question into an appropriate clinical question regarding the syringe driver and therefore guide the research. The PICO/T model describes the foundations of a well-formed clinical question (Schneider & Whitehead, 2013). PICO/T considers the following, the patient or problem, intervention of interest, comparison, outcome and the timeframe (Schneider & Whitehead, 2013).

PICO/T Table		
PICO/T Category	Information relating to question	Explanation
Population/Patients	The patient was limited to palliative patients	The patient category was limited to palliative patients because the use of the syringe driver is commonly used in the caring of palliative patients to help with the relief, and management of pain and distressing symptoms when a patient is unable to take oral medication (Ministry of Health, 2009)
Intervention of interest	The intervention was syringe driver usage in symptom management such as pain.	In regards to the intervention, syringe driver usage in symptom management, articles that focused on the patients' experience of the device and the effect on the family, as well as the advantages and disadvantages of the syringe driver will be reviewed.
Comparison	A comparison was not applicable, although brief comparisons can be made based on the patients experience before and after receiving medication via a syringe driver.	A direct comparison between the effectiveness of oral analgesia versus analgesia administered via a syringe driver was not applicable, as research showed that the syringe drive was mainly only utilized when a patient was no longer able to receive oral medication (Gabriel, 2015). As a result a comparison of the patients experience before and after the use of the syringe driver was reviewed.
Outcome	The outcome of whether patients' symptoms have been relieved and well managed, with no significant side effects or complaints was established.	The outcome, resolution of symptoms again includes the patients and families experience and perspective, but consideration of their doubts and/or negative views surrounding the syringe driver are also reviewed as this encompasses the whole emotional, and social aspect of the effectiveness of the syringe driver, rather than just the physical aspect (West, 2014).
Timeframe	A timeframe of at least 24 hours was used.	

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