# Development of the rural Palliative Care Services by the Kuala Lipis District Hospital

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## SUMMARY

In recognising the palliative care (PC) needs globally and in Malaysia, services were developed to serve the rural area of Kuala Lipis, Pahang. This communication describes the initial a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, stages of development towards achieving a successful implementation. PC services were led by Kuala Lipis district hospital include inpatient referrals, outpatient and community care through home visits. These services involve multi-disciplinary team inclusive of representatives from health clinics and allied health. Referrals and opioid usage have demonstrated an increasing trend since its implementation in October 2018. Implementation of rural PC services is feasible; however, long-term sustainability needs to addressed.

## KEYWORDS:

Palliative care, community, opioid usage, Kuala Lipis

#### INTRODUCTION

The definition of Palliative Care (PC) is comprehensively defined by the World Health Organization (WHO) 2002.<sup>1</sup> Worldwide, 25.5 million deaths were reported to experience serious health related issues in 2015; 81% from residents from low and middle-income countries.<sup>2</sup> This number is expected to increase to 48 million by the year 2060; with ageing populations and the rise of non-communicable and other chronic diseases worldwide.<sup>3</sup> WHO estimates that worldwide only 14% of people who needs PC are currently receiving it.<sup>4</sup> Amongst the 234 countries, 42% of these countries do not have access to PC and 32% only had access to isolated services.<sup>5</sup>

In Malaysia, the estimated of patients requiring PC was more than 56,000 annually; of which only 8.3% of the needs were met.<sup>6</sup> This number is projected to increase to more than 240,000 by the year 2030; an increase by 240% when compared to 2014.<sup>7</sup> It has been suggested that PC should be a universal human right of all humans but yet these services are not widely available.<sup>8,9</sup> The WHO public health initiatives described four important aspects in establishing PC and service sustainability - policy, drug availability, education and implementation.<sup>10</sup> In Malaysia, the first three important aspects has been addressed at the level of PC and recognised as amongst the forefront in Southeast Asia region.<sup>5</sup> National policy and national strategic plans have been incorporated into the PC services. Financial support has been allocated annually for on-going training and education. Opioids are available to be prescribed by physicians. The main challenges lie is the fourth aspect - in the on-the-ground implementations especially in the rural and district regions.

In recognising the need to deliver PC, a dedicated team of healthcare professional and volunteers have initiated services to the community of a rural area. Prior to its development, there was no access to PC or hospice services for patients within the rural district of Kuala Lipis; with the nearest availability is in Kuala Lumpur, the capital city (approximately distance of 60 km). Kuala Lipis is located at the north east region of the state of Pahang, in the middle of the Peninsular Malaysia and has a total of 10 Mukims (subdistricts), covers an area of 5,168 km<sup>2</sup> which is 14.6% of the Pahang state area with a population of 106,814. The main industries in Kuala Lipis are agriculture and gold mining. The healthcare facilities consist of 1 district hospital with minor specialists as the referral centre; and eight Klinik Kesihatan (Health Centre) and 23 Klinik Desa (Rural Community Clinics). The hospital has basic clinical specialties (without sub-specialities). The primary care services are led by a District Health Officer and assisted by a team of doctors led by one family medicine specialist. Rural clinics are run by staff nurses and community nurses. The service was supported by PC unit from the Hospital Selayang, in Selangor (near Kuala Lumpur).

The main objective of initiating PC in a district hospital was to provide basic PC to patients with incurable diseases and terminally ill in the community. This initiative adopted the PC approach, one of the three different options outlined by Worldwide Hospice and Palliative Care Alliance.<sup>11</sup> PC approach is "adopted by all the healthcare professionals, provided they are educated and skilled through appropriate training".<sup>11</sup> This study describes the development of PC services in the community led by general internal medicine physicians by a rural district hospital.

Prior to implementation, a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of the preexisting services was performed as outlined in table I.

As PC awareness grew among the healthcare workers and community, the number of patients referred increased. Services commenced with in-patients; which was expanded to out-patients and community home visits.

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Strengths	Weakness
Support from the Hospital Administrative team and other	In a district hospital, resources were limited - staff and limited
healthcare personnel	- staff and limited PC based drugs
	Limited availability of opioids
Identified local champions and volunteers	Lack of manpower and PC trained staff
	No dedicated staff; hence multi-tasking
	Lack of knowledge amongst patients and healthcare workers
	Lackadaisical attitude and skepticisms from colleagues
	Stigmatization of the use of opioids.
	New prescribed medications are not available out of office hours.
Opportunity	Threats
Many patients with chronic medical illnesses with frequent	Lack of sustainability
admissions, poorly controlled symptoms for	Burnout
exacerbation of their medical illnesses.	Difficulties in transportation (logistics)

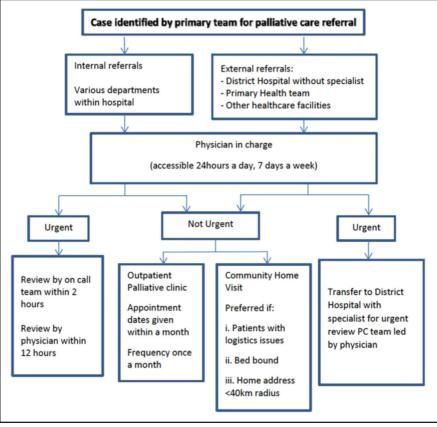


Fig. 1: Referral flowchart for PC in Hospital Kuala Lipis.

## Structure of PC team

PC team consisted of members from different units to facilitate a more holistic approach at the hospital and primary care level. A flowchart of the workflow is shown in Figure 1. Referrals are directed to physicians with special interest in PC (Department of Internal Medicine), who were accessible 24 hours a day, 7 days a week.

## **Inpatient services**

Upon referral, the PC team will review health problems of these patients in the respective wards and draw up a holistic management plan. In-patient care are given by physicians, supported by a team of allied health staff made up of nurses, pharmacists, occupational therapists, physiotherapists and dietitians. Patients who are terminally are seen within 24 hours to provide end of life care. Subsequent care plans were given as appropriate outpatient appointments or home visit.

#### Outpatient services

Outpatient PC Clinic is scheduled monthly at a dedicated clinic facility within the hospital. A dedicated staff nurse is responsible for record keeping and follows up on the appointments of patients. Each clinic is attended by a physician, staff nurse, dedicated pharmacist, and a physiotherapist. Each clinic review will include review of symptoms, medications and defining goals of care. Patients and caretakers are referred to the hospital counsellor for counselling if required. A pharmacist reviews medication for compliance of patients, efficacy and adverse effects. Physiotherapist plans appropriate exercise regimes, with concurrent treatment delivered in order to reduce the burden of multiple appointments. The other PC teams will be present upon availability.

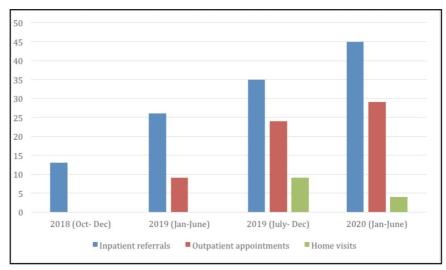


Fig. 2: Statistics of PC services.

## **Community PC**

Community home is done within working hours and the coverage area is within a 40km radius from Kuala Lipis. For terminally ill patients, home visits are arranged 1 or 2 days after their discharge from the hospital. Community PC team consists of a physician, medical officer, and pharmacist. Occupational therapist and volunteer nurses will join the visit based on availability. During each visit, the doctor will review of condition and symptoms of patients, offer counselling and support to the patients and family members. The pharmacist will carry a medication box containing basic PC medications; with prescription and dispensation of medication done during the home visit to reduce burden of caretakers visiting healthcare facility of for prescriptions. The occupational therapists would assess the Activity of Daily Living index of patients and home accessibility. Occasionally, primary care team will join the home visit as their locality would enable more frequent follow ups. Continuation of care is ensured via networking with primary care team.

### **Opioid usage**

Although opioids are accessible in Kuala Lipis hospital, their use was very limited and generally not for PC services. Since the introduction of PC services in 2018, opioid usage in Hospital Kuala Lipis has increased significantly; 2018: 9880ml/year, 2019: 11,010ml/year, and 2020: 30,658ml/year. This increment of usage of morphine reflects the increased awareness, knowledge, confidence in prescribing opioids and acceptance of usage of opioids by patients and their family members.

To sustain delivery of PC services in the community, volunteers, community appointed champions, and leaders will need to be empowered. An integrative network between the community and the healthcare systems should be planned; drawing the success in Kerala, India.<sup>12</sup>

## CONCLUSION

Palliative care services can be implemented in rural areas; led by internal medicine physicians in a district hospital. This will increase access for patients and families at the end of life and this scheme should be considered nationwide.

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