

The role of general practice in cancer care

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Kok-Ho's interest lies in infectious diseases and oncology as well as the application of novel theoretical concepts to the development of better cancer treatment strategies. Kok-Ho's primary motivation in medicine is to find a novel therapy for cancers with poor prognosis so that patients who are incurable now may have a new lease of life in the near future.

The incidence of cancer has risen in Australia and globally over the past few decades. Fortunately, advances in medicine have enabled cancer patients to live longer. We now have the means to provide better healthcare and support for this group of 'survivors'. However, this situation also poses unique challenges to the healthcare system as resources are limited but healthcare professionals are required to do more. In recent years, there has been a call for an expansion of the role of general practitioners (GPs) in cancer care. Such a primary care-based approach allows GPs to pursue their interests in cancer management and enables diversification of healthcare resources. This article will attempt to examine how general practice can be involved in cancer care in Australia.

Introduction

Cancer is a chronic disease on the global scale. In Australia, cancer accounts for approximately a quarter of all deaths. [1] By the age of 75, one in three males and one in four females will be expected to be diagnosed with cancer. [1] These figures may be attributed to higher population growth and an ageing population. [2] As patients are diagnosed earlier and receive better treatment, more cancer patients transit into survivorship. [3] Consequently, the immediate demands of cancer care extend beyond diagnosis and treatment and towards multi-disciplinary care, which focuses on providing support and improving the quality of life of patients. This article will briefly examine the factors influencing the involvement of primary care physicians in cancer care in Australia and reference initiatives implemented by other countries.

Patterns of cancer care and areas of GP involvement

Cancer management is complex and involves different healthcare providers. According to Norman et al., cancer care patterns may be sequential, parallel or shared. [4] In sequential care, patients are mainly cared for by oncology teams while parallel care requires general practice (GP) management of non-cancer problems. Shared care has the greatest GP involvement and requires joint management of cancer care by GP and oncology teams. GPs in Australia are mostly involved in screening and diagnosis of cancer and, eventually, referral to specialists who take over treatment and patient follow-up. GPs also play a role in managing the side effects of treatment as well as education (including prevention measures) of patients and their families. Depending on the treatment outcome, supportive or palliative care may also be provided by GPs.

In the future, it is expected that GPs will need to accept responsibilities outside their remit. This is due to a limited number of specialists in rural and remote areas and the need to diversify and expand the healthcare workforce. [5] Furthermore, health systems that include strong primary medical care were shown to be more efficient and have better health outcomes. [6] Therefore, there is a gradual move towards shared care models with GPs playing a central role alongside other healthcare providers. In this context, it will be important to understand the factors influencing the involvement of GPs in cancer care and how to maximize their involvement throughout the spectrum of cancer care.



Factors influencing GP involvement in cancer care

Location of GPs

The degree of involvement of GPs may depend on where they are based. [7] Out of necessity, GPs in rural and remote areas could be involved in coordination of cancer care and also some aspects of treatment (e.g. pre-chemotherapy checks) and follow-up of side effects. Conversely, GPs working in urban settings were more likely to refer patients upon diagnosis.

Studies have shown that indigenous Australians and other minority groups living in rural or remote areas have higher cancer mortality rates due to reduced access to healthcare. [8] GPs working in these settings could reduce this inequality through better prevention and diagnosis, timely referrals as well as treatment of co-morbidities-areas which are traditionally within the remit of primary care. [9] Although the cancer curriculum in Australian GP training focuses on these areas, it is estimated that GPs only encounter about four new cancer cases each year with cases exhibiting huge variability in cancer types and treatment requirements. [7] Such a scenario necessitates opportunities for GPs to improve their skills and experience through case-based learning and seminars. [7] Online learning modules offered by Cancer Australia are a good starting point but more effort will be required to promote these learning opportunities as GPs may not be aware of such resources. [7,10]

In recent years, the rise of telemedicine has provided an important tool in connecting rural GPs and specialists. This has enabled rural GPs to be more involved in cancer care as they can easily gain access to specialist knowledge. In Queensland, medical oncology services via videoconferencing were trialed and provided to remote and rural communities. [11] Satisfaction levels were high among both patients and rural health workers with such benefits as reduced time and money, improved communication between specialists and patients and greater access to specialist support by rural GPs. [11]

Communication pathways

Communication between GPs and hospital-based services is regarded as a major challenge facing general practice in Australia. The main form of communication from hospitals to GPs is the discharge summary and specialist letter with GPs receiving information mainly from hospital medical officers. [5] The variable quality and poor

timeliness of information received has been shown to impede quality communication between GPs and hospitals. These factors were attributed to poor understandings of GP roles in cancer care and their information needs, as well as inexperience of medical officers. [5] It was found that hospital communications to GPs tend to omit social information about the patient. As cancer patients have been shown to be dependent on GPs for psychosocial support, the social needs of cancer patients may not be addressed adequately by GPs if poor communication persists. [1]

It was also shown that GPs preferred to receive a multi-disciplinary discharge summary containing input from all health professionals involved. [5] The creation of electronic health records may facilitate the development of such a discharge summary. In Canada, the British Columbia (BC) e-health initiative allows authorized health professionals working in BC to access complete patient records when and where they were required. [12] This initiative was shown to reduce patient delays and costs to healthcare providers and patients and is a great demonstration of how improved communication via improved access to patient records may improve healthcare outcomes of cancer patients. Nonetheless, it is important that such electronic platforms are developed for and with healthcare practitioners to allow them to tackle the patient's needs without being burdened by technology. [12]

Regular meetings may also improve communication between GPs and specialists. Mitchell et al. suggested that GPs should be regularly involved in hospital-based multi-disciplinary team (MDT) meetings. [13] It is heartening that a national survey found that 84% of GPs would consider taking part in MDT meetings should the opportunity arise. [14] This suggests that formalization of MDT meetings is highly feasible. Cancer patients may benefit from the sharing of experiences between members of a formalized MDT team and this could be crucial to patients who suffer from low-incidence cancers where experience of the team matters and also to GPs, who would otherwise have little awareness about which specialists to approach for specific cancers. [13]

Remuneration and financial incentives

Inadequate remuneration may also deter GPs from accepting additional responsibilities. A recent study found an increasing proportion of Australian GPs are not involved in palliative care (25%) as compared to previous rates of 5% and 8% in 1993 and 1998 respectively. [15] Poor remuneration in relation to the time and knowledge required for palliative care may be a deterring factor. There is currently no requirement for GPs to provide after-hour services for palliative care and some GPs also reflect that they are not confident enough to manage the technical and psychosocial aspects of palliative care. [15]

Financial incentives may be helpful as the workload of GPs has increased but their incomes have decreased relative to specialist incomes. [6] In the United Kingdom, the Gold Standards Framework for palliative care rewards GPs who are interested in palliative care and demonstrate quality care through regular meetings and maintenance of a patient register. [16] Such a scheme may attract GPs to be more involved in palliative care. In addition, to increase involvement of GPs in population-based screening programs, the current payment scheme in Australia should be revised to reward service not just based on service to symptomatic patients but also asymptomatic cancer patients who approach GPs for counseling and other psychosocial issues. [8]

Role of healthcare providers

The roles of healthcare providers are often unclear. Holmberg et al. reported that while some people understand the role of GPs in cancer care, others felt that their roles were not stated explicitly in guidelines. [17] The varying perception of GP roles may hinder GPs from expressing their information needs and prevent their expanded involvement in treatment and follow-ups. It has been shown that patients prefer to know who is in charge and parallel care may provide a clearer definition of GP and specialist roles. [18] Moreover, parallel

care is not as demanding as shared care in terms of the level of communication required to facilitate coordination of cancer care and may therefore be favoured by both GPs and specialists. [18] While it is important to align patients' perception with the preferences of healthcare providers, a parallel pattern of care may not be necessarily be the most effective. This explains why there is now a gradual move towards multi-disciplinary care based on shared care models, which was highlighted in Australia's 2009 report on 'A healthier future for all Australians'. [19]

A shared care model would require clarity of roles and a need to recognize and expand the role of primary care without compromising healthcare outcomes. Two randomized control trials in the United Kingdom (UK) and Canada showed that follow-up of breast cancer patients by GPs was as safe as follow-up by specialists while an Australian study showed no difference in recurrence rates of colorectal cancer patient after follow up by GPs or specialists. [20,21] These studies imply that GPs may undertake a greater role in the follow-up phase. Similarly, there may also be a growing role for GPs in the treatment phase, in terms of management of toxicity episodes or pre-chemotherapy checks, as new oral chemotherapeutic agents are developed. [13]

Access to protocols such as The Cancer institute NSW Standard Cancer Treatment Program (CI-SCaT) may allow GPs to manage cancer patients without requiring too much reliance on specialist expertise. [13] Similarly, GPs can access wiki-based clinical practice guidelines which are developed and constantly updated by Cancer Council Australia. [22] GPs based in rural/remote areas have been relying on generic clinical skills adapted to cancer care to manage cancer patients for years and supplementation of these skills by specialized cancer information may improve the feasibility and practicality of GP-based cancer management. [23]

GP preferences and input

While there is much potential for the expansion of GP roles, GP preferences and their input in cancer plans needs to be valued. GPs generally express interest in being involved in areas that are traditionally within their remit such as prevention, diagnosis, surveillance and psychological support but less than 50% of GPs expressed a desire to undertake coordination roles in treatment and supportive care. [7] These observations may reflect underlying structural and systemic constraints (e.g. workload and payment structures) that could only be addressed effectively at a governmental level. Conversely, as mentioned previously, GPs in rural/remote areas are already actively involved in coordination of cancer and psychological care and thus they may accept expanded roles more readily.

Ultimately, there needs to be a buildup of trust and confidence in GP capabilities and increased involvement of GPs in cancer control plans will be necessary. Internationally, the UK National Health Service (NHS) has involved GPs in its cancer plan since 2000. [1] Similarly, in Australia, GPs have been involved in the National Service Improvement Framework for Cancer while a scoping exercise undertaken by the National Cancer Control Initiative in 2004 has sought to identify areas of priority to support cancer care by primary healthcare providers. [1] A result of which was the Cancer Service Networks National Demonstration Program (CanNET) which was funded by the Australia government in seven states. It was conceived as a means of identifying opportunities to improve the organization and delivery of cancer care via MDTs and managed clinical networks (MCNs) so as to improve outcomes and reduce disparities in cancer survival rates across population groups. [24]

Lessons from CanNET

The evaluation of CanNET provided valuable insights into the provision of multi-disciplinary cancer care. For example, in addition to effective communication, it was found that networking events and activities were essential to building up professional relationships between

healthcare providers. [24] Moreover, although GPs were willing to be involved in MDT sessions, engaging GPs was found to be difficult due to constraints imposed on general practice. [24] This suggests that while examining constraints on the specialist side is important and has been researched extensively, increased focus should also be placed on alleviating constraints on the GP side.

CanNET was also found to increase the work burden for healthcare providers. [24] This has prompted a re-think of healthcare providers' roles to incorporate more flexibility. A number of innovative roles are found overseas and could be trialed in various CanNET networks. For example, the Uniting Primary Care and Oncology Network (UPCON) in Manitoba advocated the use of medical leaders in the form of lead family physicians (FPs). [25] These lead FPs are primary care physicians within a practice who have an interest in cancer care and constantly engage in regular education programs and meetings jointly organized by oncologists and FPs. They disseminate useful information to colleagues and also play an advisory role by raising issues pertaining to primary care during meetings with oncologists and the Manitoba cancer agency. Besides occasionally accepting referrals, lead FPs did not have to perform difficult or unfamiliar tasks and they were remunerated according to their level of involvement. [25] This program managed to improve the partnership between GPs and other healthcare providers and could potentially fit into the Australian system.

Consistent with the theme of medical leadership, it was found that the introduction of continuing professional development (CPD) was effective in promoting local champions in some CanNET networks. CPD opportunities such as mentoring and clinical placements were received positively and more than half of the healthcare providers surveyed acknowledged that these activities helped increase their knowledge and skills and provided valuable networking opportunities. [24] Nonetheless, more work is required to address potential constraints such as workload and staff shortages. This again raises the importance of tele-oncology as a possible solution as essential oncology skills may be learnt during GP sit-ins with patients, therefore reducing the need for face-to-face attendance of workshops.

Looking to the future- the ideal oncology curriculum

The Oncology Education Committee of Cancer Council Australia has developed an ideal oncology curriculum for medical schools with the aim of equipping students with the knowledge, skills and attitude to provide quality care to cancer patients and their caregivers. This curriculum has been reviewed recently to include more emphasis on clinical experiences such as 'observing all components of multi-disciplinary cancer care'. [26] These changes reflect the need for future doctors who are able to work within a multi-disciplinary cancer

care setting and who can understand the role of healthcare providers (including GPs) in different phases of a cancer patient's journey. [26] Students who are interested in becoming GPs will need to be familiar with the specific needs and requirements of cancer patients as GPs are often the first point of call. Furthermore, students who take up the Medical Rural Bonded Scholarship Scheme (MRBS) and end up in rural settings will be expected to take up more responsibility than their urban counterparts. As such, changes in medical education may pave the way for changes in future medical practice.

Conclusion

Cancer management in Australia is gradually changing toward a shared care model with a focus on multi-disciplinary care. In this context, there is an increasing demand for GPs to expand their roles to relieve the pressure on other healthcare providers. Existing constraints that impede the involvement of GP will need to be addressed. These include issues pertaining to communication, remuneration, role clarity as well as GP preferences and input. A number of initiatives such as CanNET were implemented and has helped identify areas which could promote a greater role for general practice in cancer care. Overseas healthcare initiatives such as UPCON and the BC e-health initiative will also provide further valuable lessons in our search for solutions. Currently, tele-oncology appears to be a viable approach in improving rural GP involvement in cancer care and alleviating workload and staff shortages.

In conclusion, GPs have the capacity to provide quality cancer care alongside their specialist counterparts and it would be a more efficient use of healthcare resources to involve rather than neglect them. It is unlikely that specialist cancer care will be compromised as they form the core component of the actual treatment process whereas GPs are envisioned to take up coordinating as well as diagnosis and follow-up roles. As the roles of the GP can be flexible depending on preference and expertise, this is in itself advantageous as cancer care is no longer limited by the number of specialists. Specialist care may also be enhanced due to a more focused and individualized approach afforded by the less workload taken on by the specialists.

Acknowledgements

None.

Conflict of interest

None declared.

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