Asthma management in primary care: caring, sharing and working together

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Why aren't primary care physicians and pharmacists collaborating more to manage and monitor asthma medication issues? <http://ow.ly/YB2p6>

While historically chronic illnesses have been “stewarded” by different practitioners in different countries [1] with the increasing number of people with chronic illnesses and the ever rising costs of healthcare, the primary care setting is viewed as the long-term custodian of chronic illness management [2–4]. For people with asthma, quality management in primary care is a real, viable and accessible solution to asthma care. This is reflected in guidelines [2, 5, 6], in research trends (as we see pragmatic research sourcing participants in primary care) [7, 8] and it is evidenced in a multitude of primary healthcare initiatives established to support primary care physicians to optimally manage asthma in the community.

Optimal asthma management: are we achieving it? Or is it an enigma? These are questions that primary care researchers and healthcare practitioners have been burdened with for a long time. Why? Because evidence, from large-scale and population-based studies confirms that, despite our ever-increasing knowledge and the abundance of research in the practice/clinical field, asthma remains a major health and economic burden. It is estimated that ~300 million people live with asthma world-wide [2] and a high proportion of people living with asthma are classified as having poorly controlled disease [4, 9–13]. Asthma has significant economic impact both on individuals and on the healthcare system. A recent report determined that the net annual value of the burden of disease of asthma in Australia (based on disability-adjusted life years) was AUD 24.7 billion, with projected government costs for 2016–2019 being AUD 4.0 billion [14].

For primary care practitioners, the current status of asthma in the community is at the very least disappointing, if not frightening; especially given the efforts put into improving asthma care at all levels (health system, research, global reports, practice initiatives, patient support and public awareness). The reality is that the multifaceted initiatives are falling short of addressing the multifactorial issues associated with sub-optimal management in real life [2, 10, 11, 15–18]: issues spanning across patient, healthcare practitioners and healthcare-system domains [12, 19].

One of the major issues in practice is asthma medication use. Medication management is a well-recognised, documented and investigated aspect of asthma management. Consistently research and practice indicate that many of the issues associated with sub-optimal management of asthma are related to the way in which people use their medicines, *i.e.* a high proportion of patients are nonadherent and a majority do not master or maintain correct inhaler technique [9, 10]. Effective solutions to inappropriate and incorrect asthma medication use have been identified through high quality research; however, if these strategies are being implemented in practice [2], they fail to be effective. Current data report poor adherence remaining as high as 50–90% and incorrect inhaler technique at 70–80% [9, 10, 12, 20]. There is an abundance of literature providing insights into why patients use their medications inappropriately [21, 22]; however, the solutions are complex, require significant and often additional resources, and need to be implemented continually

Received: Feb 01 2016 | Accepted: Feb 14 2016

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over time [22–24]. Is it therefore reasonable that one primary healthcare provider should take on the burden of addressing all of these issues, alone? No. It is time to call for the assistance of a medication expert: the pharmacist.

Pharmacy is one of the oldest “healing” professions and has a long history of working with physicians. In fact, wherever civilisation arises we find evidence of the roots of pharmacy, with its existence fulfilling one of man’s basic needs: “the need to grasp from nature whatever might shield us from affliction” [25]. Clay tablets dating back to 2600 BC and ancient Babylonian times provide evidence that healing involved the describing of illness, the formulation and preparation of remedies, and incantations, which were used to impart or enhance the healing quality of the medication [25, 26]. These ancient artefacts provide evidence that during times long passed the art of diagnosing, prescribing and compounding of remedies were closely linked. They remind us that for most of recorded history, the history of pharmacy and medicine were inseparable [26]. So what has happened since then?

Times have changed and it is reasonable to say that despite recognition that teamwork is critical to chronic illness management [27, 28], primary care physicians and pharmacists generally work in isolation. This is not to say that they can’t work together effectively [29, 30], but in practice they generally don’t. Despite the fact that a relationship between primary care physicians and pharmacists often does exist, and attitudes towards one another are positive [31–33], interactions are generally limited to issues associated with medication dispensing [34]. While professional relationships are a complex area of practice, primary healthcare practitioners, in particular, appear to have limited understanding/confidence in the breadth of knowledge of their pharmacy colleagues, having differing needs and mismatched expectations of what their relationship should be [31]. Consequently, when it comes to asthma medication management, the assistance of the pharmacist is overlooked... despite the evidence.

Of particular relevance to this discussion is the systematic review by GARCIA-CARDENAS *et al.* [35] in this issue of the *European Respiratory Journal*. GARCIA-CARDENAS *et al.* [35] review the impact of pharmacist interventions on clinical asthma outcomes. Utilising the methodology and reporting standards recommended by PRISMA [36] and AMSTAR [37], they review the published literature on pharmacist interventions in asthma management, drawing their conclusions from the available randomised controlled clinical trials. In so doing a range of research designs, interventions and outcomes measures were reviewed, with the conclusion that regardless of the study design pharmacists had a positive impact on asthma control. While GARCIA-CARDENAS *et al.* [35] did not focus on individual interventions, but noted the need to implement consistent research methodology in pharmacy practice research, an abundance of literature exists on the impact of pharmacist interventions on asthma outcomes. In addition to improving asthma control, pharmacist interventions have been shown to effectively identify patients at risk of poorly controlled asthma, improve adherence, correct inhaler technique mastery and maintenance, and assist in the development of medication self-management practices [20, 38–48]. In summary, willing pharmacists can provide valuable support to primary healthcare physicians in their management of asthma.

And are there barriers to engaging the pharmacist in clinical care? Of course there are, but for over a decade the pharmacy profession has been transforming towards care delivery [49–59] and some of the barriers to pharmacists being acknowledged as providers of quality care are associated with the perceptions of others outside pharmacy, rather than reality. There is no doubt that pharmacists can assist in the management of asthma and they are willing to do so.

I conclude by asking the following questions. Why aren’t primary healthcare physicians working with pharmacists more closely to identify, manage and monitor the medication issues? Why are pharmacists not included as a fundamental piece of the medication puzzle? And if “real-life research” is so critical to our understanding of the day-to-day issues for people living with asthma, why are pharmacists not part of research and practice initiatives? If real-life problems and solutions are what we are after, then we cannot look past pharmacy, as it doesn’t get any more real-life than that!

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