Public health and emergency medicine

You've spent your career working hard for each individual patient that you see, but do you ever get frustrated by seeing the same sort of preventable injuries and illnesses coming through the front door of your Emergency Department (ED)? What about the injured child cyclist? The adult with recurrent alcohol, tobacco, or drug-related illness? Presentations due to failures in under-resourced community and social care systems? People struggling with mental health problems because they have nowhere else to turn? The ED is one of the busiest parts of the health system, with annual patient-doctor interactions in the tens of millions, but how often do we take the opportunity to think about the "bigger picture", let alone have a positive impact on it?

In the context of an overcrowded acute care system, an ageing population, and increasing attendances to the ED, we need to consider how to care for the individual patient in front of us, but also think about the population from which they come. Public health approaches can have a positive impact in bringing about lasting change both for patient and population, and could play a valuable part in the future of the ED.

But what is public health (PH)? The World Health Organization (WHO) defines it as "the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society'.

Public health is also thinking outside the box; the need to understand the how and why of a disease affecting the person in front of you, their families and their communities; the desire to do something to protect populations from threats to their health and wellbeing. In the UK, PH is underpinned by a series of domains, all of which contribute to the dual aims of increasing healthy life expectancy and reducing health inequalities. The domains can be described as:

- improving the wider determinants of health
- health improvement
- health protection
- healthcare public health

It is clear that we in Emergency Medicine (EM) can learn much from our PH colleagues - the people who understand about population medicine and can influence change in policy. But what can they in tum learn from us, from our unique and exciting stance at the front door to the hospital, from the specialty that has its finger on the pulse of the health service? Individual and population health are inextricably linked, so EM working alongside PH could be a great force for positive change.

This is not a new agenda - there are EDs all over the world engaging in these types of forwardthinking activities. For example, colleagues at Yale School of Medicine have developed a successful programme designed to deliver behavioural treatments for patients presenting to the ED who abuse drugs and engage in hazardous drinking.

And what about the UK? Every day, staff in EDs do fantastic work to support individual patients and the wider population, and which could already be considered in the realm of public health interventions - from making referrals to drug and alcohol services, to advising patients on road safety. But there is lots more to do, and while EM capacity is over-stretched, some of this work does not require additional resources and, in the longer term, will help to alleviate the current pressures.

For example, some EDs in the UK have provided novel locations for the delivery of existing public health schemes - offering intranasal seasonal influenza vaccination to children; screening adults for HIV, offering brief interventions for alcohol misuse. The ED also offers an opportunity to make

better use of healthcare data to inform urgent care systems design and to contribute to effective injury prevention strategies in the community. Despite all of this, however, there is not yet a coordinated approach to generating evidence at, or focusing research on, the interface between PH and EM in the UK.

Additionally, surveillance is a key area where we can work closely with our PH colleagues. We are in a powerful position to collect huge amounts of data for informing public policy, detecting outbreaks of disease early on, and improving the way future health and social care services and systems are designed and best respond to needs and demands. Our information systems are about to get a whole lot better with the introduction of the Emergency Care Data Set (ECDS), where we will be able to more accurately monitor patterns of disease and ED attendance. As individual practitioners we all play a vital role in this - by accurately recording and coding patient encounters. Interested individuals can get more involved through anything from audit and research within their own ED, to liaising with local PH colleagues, clinical commissioning groups (CCGs), or colleagues in Public Health England (PHE).

In this climate of political uncertainty, increasing demand for services and the roll-out of sustainability and transformation plans (STPs), working with PH in our EDs may provide a solution to at least part of the puzzle when thinking about how we manage future demand.

So, next time you take a history from a patient or do a chest examination, remember to ask about smoking - there is evidence that this small public health intervention may have a positive impact on quit rates. Also have a think about how you can strengthen the PH activities in your department - perhaps it is through using the time patients are waiting to be seen to promote a healthy lifestyle or empowering them to realise they can manage their own health. Maybe it is through better use and sharing of your ED's healthcare data and audit. As an EM practitioner, you are an expert in knowing how to mobilise your department's resources and systems to the benefit of individual patients. Now consider how those resources and interdepartmental relationships could be efficiently mobilised as a health-promoting ED for the benefit of the wider communities from which your patients come.

If public health sounds like something you want to be engaged in, or you already are doing something great in your department that you want to share, then look no further. The RCEM has a new PH Special Interest Group (SIC) that is excited to hear from you. We believe that the way PH can succeed in our EDs is through our collaboration and shared learning, nationally and internationally