

The Role of Podiatric Medicine in Public Health

Look beyond the feet.

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Much more emphasis needs to be given by our profession to this expanded context in public health and to the added value that we can provide to the public. Indeed, making this paradigm shift can even have a major influence on policy makers and health providers regarding their perception of podiatric medicine within the healthcare community.

In a play entitled *Charimedes or Temperance* written by Plato in 380 BCE, there is the following statement: “{A}s you ought not to attempt to cure the eyes without the head, or the head without the body, so neither ought you to attempt to cure the body without the Soul. And this ... is the reason why the cure of many diseases is unknown to the physicians of Hellas (i.e., Greece), because they disregard the whole, which ought to be studied also, for the part can never be well unless the whole is well.”

So when seeing patients, look up. Look up slowly. Don't just look down at the two weight-bearing appendages called feet. If we believe there is a significant role for podiatric medicine in public health, now is the time to remember what Plato wrote and be sure to look up and look up slowly: observe... note that there is a person connected to the pedal ex-

tremity and that person exists in an environment in a community, has some influence on that community, and is influenced by that community, partially determining the type and extent of the ability to ambulate.

Implications of the Environment on Public Health

Podiatric physicians should observe the environment in which we live and in which they practice. Remember, there is a person attached

ability to get from place to place using the pedal extremity that bears our weight and permits us to move in an upright position while interacting with the environment and community in which we live, work, and play. But remember, that structure is an integral part of our body. It not only permits standing, walking, or running, but also by virtue of the process of locomotion, makes a major contribution to facilitating (or hindering) the maintenance

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to the structure called the feet. We prevent, diagnose, and treat people who come to us complaining about a foot disorder. The added contribution that the profession can make, should make for people, the public health, the community, and the environment is vast. However, many of those in our profession have failed to realize it. If we do not fully realize our broader role in the health of the public, why should others in the community, including those in other professions, do so?

Humans have been given the

of health. Indeed having foot pain when walking, inhibiting our ability to walk, or not being able to walk at all, can and does adversely affect one's cardiovascular health by reducing a major source of exercise needed to stimulate cardiovascular function.

It also allows for stimulation of the musculoskeletal system, bone growth, and the strength of our muscles so that our feet can support our weight and facilitate ambulation, hopefully preventing pain for a life-

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time. People who are unable to walk comfortably or engage in appropriate physical exercise due to a podiatric disorder are much more likely to become overweight or obese, develop

Furthermore, if one has difficulty walking, it also may have a major impact on one’s ability to fully interact in society.

Therefore, focusing only on the foot not only limits the potential role of the clinician, but it is also a disservice

to the maintenance of the health of people in the community rather than solely in the individual. Indeed the “patient” of public health is, in fact, the community. Public health is a term that is not specific to any disease and, therefore, does not focus on any

TABLE I:
Natural History of Podiatric Medical Disorders

Period of Pre-pathogenesis		Period of Pathogenesis		
Health Promotion	Specific Protection	Early Diagnosis & Disability Prompt Treatment Limitation		Rehabilitation
<ul style="list-style-type: none"> • Health Education • Regular Exercise 	<ul style="list-style-type: none"> • Proper Shoes • Reg Med Care • Safe Environ. 	<ul style="list-style-type: none"> • Regular Ft Exam • Prenatal Care • Preventive Surgery 	<ul style="list-style-type: none"> • Early Treat • Orthotics • Physical Therapy 	<ul style="list-style-type: none"> • Focused Exercise • Rehabilitative Surgery • Physical Therapy
Primary Prevention		Secondary Prevention		Tertiary Prevention

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life-threatening cardiovascular disease, or become the victim of diabetes and perhaps suffer from its many systemic complications.

Many who go to a cardiologist or internist and are advised to do more walking and are prescribed exercise they need to stimulate their heart, too often leave that

vice to patients if all we did was treat foot symptoms and signs. However, while signs and symptoms people have in their feet lead us to a diagnosis, this may and should also raise our index of suspicion for disorders that, while manifested in the foot, may originate somewhere else in the body. These signs and symptoms

specific disease, illness, or part of the body. Its concern begins before one has a problem and before we put a label on a disease or disorder; it focuses initially on the maintenance of health.

Indeed, the maintenance of health is not disease-specific at all. As already hinted, by providing advice to people who may not yet have foot complaints but who may have questions about how to preserve their foot health, we will also be contributing to their general health and to the health of the community in which they are a part. In addition, not only will people be in a better position to avoid foot problems, simultaneously they will be preserving normal locomotion and facilitating general health such as contributing to the ability to engage in cardiovascular and musculoskeletal-stimulating locomotion.

They will be able to better interact with and contribute to the society in which they live. Therefore, public health, in the broad sense, not only refers to the individual but to the public, or more specifically, to the

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doctor’s office and just forget the whole thing. Why? It’s not because they are non-compliant, but simply because their feet may be painful or stiff, and engaging even in such a seemingly simple exercise as walking is impossible without experiencing pain. Or neuropathy affecting their feet makes it difficult or even impossible to move more than short distances because of discomfort, numbness, or instability affecting the plantar surface of their feet.

may be due to local disorders, but in many situations, they are manifestations of diseases and disorders that emanate from other parts or systems of the body.

Podiatric Medical Contributions to the Maintenance of Health

So why is all this important? What does all this have to do with public health? And what does it have to do with podiatric medicine? First, public health is concerned about the

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community. It focuses on the natural history of disease which begins with health promotion which is not disease-specific (Table 1). It has as its purpose promoting health by focusing on the human host, disease-producing agents, and the environment in which we live.

Podiatric Medical Role in Preventing Falls

For example, what can be done in and to the environment and to and by the human host to prevent falls? The incidence of falls continues to grow as the world population ages, and its relevance to podiatric medicine cannot be overestimated. The consequences of a fall are some of the most prevalent causes of serious injury or death, especially in older people. The causes of falls often include host and environmental conditions that lead to such consequences. Among the more frequent causes of

falls are pedal deformities such as,

but not only, hallux valgus, other metatarsophalangeal conditions, hammer toes, improperly fitting shoes, objects on the stairs inside homes, cracks in sidewalks, just to name a few.^{1,4}

Diabetic neuropathy and other diseases causing neuropathy may cause foot pain or affect the foot in ways that reduce proprioception or the ability to perceive its place in space, not infrequently precipitating a fall. The growing population of older people globally is facilitating the production of a much larger set of individuals with diabetes, foot deformities, and osteoarthritis affecting the foot, each of which are inciting factors leading to falls. Preventive or definitive podiatric medical care not only will improve foot health and function, but can be extremely important to overall health, and per-

haps be even lifesaving.

Also, its effect on the community cannot be overestimated since podiatric disorders and podiatric medical conditions contribute to the rising costs of healthcare.

A recent release by the U.S. Cen-

ters for Disease Control and Prevention (CDC) concluded that walking is the most commonly reported physical activity by adults. To encourage increases in the prevalence and frequency of walking, podiatric medical practitioners, in cooperation with communities, can be leaders in promoting and encouraging the implementation of strategies that create or enhance access to places for walking, or enhancing design and land use policies and practices that emphasize

primary care physicians annually or semi-annually, and as part of those visits, they have their blood pressure checked.

Since there may be several months between the visits they make to their primary care physician, the provider of their podiatric medical care should, as a routine part of the visit, take the patient's blood pressure. No patient should visit a DPM without having their blood pressure checked. This could be done each visit very quickly by the podiatric physician or their assistant on a routine basis. So many of our podiatric medical patients may have undiagnosed hypertension or hypertension that is either not adequately being treated or out of control. Not only would such a finding be useful in the establishment of a podiatric treatment plan, but it also would be vital to the overall health of the patient.

In addition, referring patients with abnormal blood pressure to the physician who is managing their overall healthcare would be a major contribution to their health. This relatively simple, benign procedure can be a significant contribution to the health of patients, while also providing a major communication to patients and the healthcare community of the role that podiatric medicine has as part of the healthcare team.

Similarly, because of the frequency that podiatric medical care is provided to patients, the practitioner is also in an excellent position to observe changes in a patient from one visit to another in such functions as gait, and could make extra-pedal observations including

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mixed-use communities and pedestrian-friendly streets.

The impact of these strategies on walking should be monitored systematically at national, state, regional, and local levels. Public health efforts to promote walking as a way to meet physical activity guidelines can help improve the general health of people internationally. Noting this, the role of podiatric physicians in ensuring painless, stable, and safe walking environments cannot be over-emphasized, not only because of its importance to foot health but its importance to the overall health of the public.⁵

Participating in the Continuity of Healthcare

It is important to point out that people with foot problems are often seen several times a year by podiatric medical practitioners, sometimes

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speech patterns, skin lesions on exposed parts of the body that were not previously observed, just to name a few. Such findings could be clues of health problems that, while perhaps not podiatric in nature, require the attention of another healthcare practitioner such as the family physician or another healthcare provider.

Conclusion

Because of the often long-term, doctor-patient relationship podiatric physicians develop, patients may be considerably more likely to take their advice or share with the podiatric physician some of their non-podiatric health problems. Suggesting to patients to refrain from smoking or, if they already are smokers, to convince them to enter a smoking cessation program is an example.

Too often we focus our role only on preventing intrinsic lower extrem-

ity disorders. This undervalues the very important role that we have in the total health of our patients and the community. An expanded role in public health and prevention that podiatric medical care can provide both directly and indirectly has an impact not only on the health of the community and on individuals but on the enormous costs to society. Much more emphasis needs to be given by our profession to this expanded context in public health and to the added value that they can provide to the public.

Indeed, making this paradigm shift can even have a major influence on policy makers and health providers regarding their perception of podiatric medicine within the healthcare community. Hence, the message, don't just look down—look up...very slowly. **PM**

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at home. National Center for Biotechnology Information. Age and Ageing. 28 (2). pp 121-125; 1999.

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