Letter to the Editor

Understanding doctors’ and dentists’ lack of focus on Oral Medicine: another example of the bystander effect?

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Dear Editor,

Oral Medicine, truistically defined as the part of Medicine pertaining to diseases of the mouth, has a history probably as old as Medicine itself. For instance, there are numerous mentions in ancient Egyptian, Assyrian or Greek medical texts of the benefits of tooth extractions to cure pains in various parts of the body, establishing as early as 2100 BC a relationship between oral and general diseases [1]. Almost 4000 years later, in 1778, the famous English surgeon John Hunter, in his treatise “The Natural History of Human Teeth”, suggested the same (complicated) relationship:

“The teeth, being singular in their structure, have diseases peculiar to themselves. These diseases, considered abstractedly, are indeed very simple, but by the relations which the teeth bear to the body in general and to the parts with which they are immediately connected, they become extremely complicated.” [1]

Fast forward to 2020. Several medical professions and many medical specialties have emerged, of which most have (or should have) a vested interest in Oral Medicine, including dentistry, stomatology, dermatology, otorhinolaryngology, oral and maxillo-facial surgery, gastroenterology, pediatrics, infectiology, general medicine or internal medicine.

With so many specialties, how can we explain the often-major diagnostic delay of oral diseases, even the simple ones [2,3]? Could such a puzzling paradox be simply explained as another example of the bystander effect?

In 1968, social psychologists Bibb Latané and John M. Darley described the “bystander effect”, an explanation to the often-observed sad social paradox that in an emergency situation, the more bystanders are present the less likely they are to intervene [4]! They explained such grueling paradox with the notion of “diffusion of responsibility”, namely: the more people there are, the less personal responsibility each individual bystander feels [4]. Interestingly (or maybe thankfully), diffusion of responsibility was not the result of apathy or anomic but of a genuine implicit belief that other people were probably more qualified to intervene in such emergency situations.

A similar phenomenon seems to exist in the medical field: medical doctors have but little specific training and focus on the mouth and its diseases [5–7] (often implicitly considering that it is not part of their scope of practice [8]) and dentists (especially general dental practitioners) eagerly rely on medical doctors for all non-dental related oral diseases, referring oral diseases that medical doctors often don’t really have any expertise on. Furthermore, a recent French national survey showed that at least half of surveyed dentists considered that oral mucosal diseases were not part of their professional responsibility [9]. It seems therefore that medical doctors count on dentists (and maybe oral surgeons to some extent) to manage oral diseases, whereas (non-specialist) dentists count on medical doctors to manage the same diseases!

If neglect of Oral Medicine stems from the bystander effect in the medical community, how can we address such critical issue?

Maybe the answer is to be found in the understanding gathered from studying the bystander effect. In another seminal study, Latané and Darley have suggested that due to the intrinsic nature of emergencies, bystanders go through the following cognitive and behavioral processes [10]:
– Notice that something is going on.
– Interpret the situation as being an emergency.
– Estimate the degree of responsibility.
– Determine the best form of assistance.
– Implement the action choice.

Similar processes can be observed in medical practice (Table I).

By making such (easy) parallel between the bystander effect and the equivalent diagnostic process, one can glimpse

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at a possible solution: to take charge of the “emergency” (or here the clinical case) without falling into the immediate preconception that there will always be another more qualified specialist to manage the case. Indeed, with such fallacious reasoning, one incurs the risk of diagnostic delay or no diagnosis at all!

How do we encourage doctors and dentists to “take charge”? One possible solution is to instill a sense of responsibility and accountability for the management of oral diseases in our trainees. We must be very careful as educators not to unconsciously teach our dental students that doctors “always know best” (unfortunately untrue…) and that they can always be counted on to decide the best course for one's patient. A common example of such misconception is found in the management of the patient at risk of bacterial endocarditis. The common attitude of (young) practitioners seems to be: “I will get in touch with the patient’s cardiologist so he can decide if my dental treatment requires an antibioprophylaxis”. Such attitude unfortunately fails to take into account the fact that the cardiologist is frequently not knowledgeable of the various dental procedures and how much bacteriemia they generate. Although the cardiologist can help the dentist determine the endocarditis risk of the underlying cardiopathy, it will still remain the dentist's responsibility to estimate the bacteriemia generated by the dental treatment he proposes. Dental students must be taught this during their undergraduate training.

Another way of mitigating the bystander effect in Medicine could be to better formalize the referral process for both doctors and dentists faced with an oral disease outside their scope of expertise. How sad is it to see young dentists naively referring undiagnosed oral diseases to the patients' general practitioners. It would behoove us educators to consider instating formal training on the referral process (and underlying ethical and medico-legal implications) to avoid having patients “lost in referral”.

Finally, concluding on an optimistic perspective, let us hope that the joint new specialty of Oral Medicine/Oral Surgery shared between doctors and dentists, will allow “the mouth to finally return to the body” [1]. This will only be possible if this specialty gains its necessary and well-deserved visibility, establishing its specialists as the proper experts for all referrals regarding diseases of the mouth.

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Table I. Adaptation of the bystander effect cognitive model [10] to the medical diagnostic process.

| Bystander effect | Medical equivalent |
|------------------|--------------------|
| 1. Notice that something is going on. | 1. Detect the clinical anomaly. |
| 2. Interpret the situation as being an emergency. | 2. Determine that this anomaly needs treatment. |
| 3. Estimate the degree of responsibility. | 3. Estimate your personal level of expertise on the subject. |
| 4. Determine the best form of assistance. | 4. Decide to treat or to refer to a specialist. |
| 5. Implement the action choice. | 5. Treat or refer (specifically to one specialist). |

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