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Can Witty Introductory Quotes Help Rivet Attention in Chemical Pathology?

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Abstract

Objectives: The objective was to assess the impact of witty introductory quotes at the beginning of a lecture or tutorial with respect to riveting an audience's attention in chemical pathology.

Methods: The statement 'I am inspired to listen and know more by a witty introductory quote or statement' was included in a validated medical student questionnaire, as well as in a shorter questionnaire distributed to another smaller group of medical students after a weekend seminar. This statement was also tested in pilot in a school-aged students questionnaire but was later removed from the final questionnaire due to poor post-test reliability in this age group.

Results: A heterogeneous response was noted with respect to agreement or neutrality on the matter with, however, a general trend shifted towards and favouring agreement with the statement, with a fewer proportion in disagreement. Mathematical modeling also revealed this factor to be a significant predictor of interest in chemical pathology with it, however, somehow counterintuitively, being more predictive when 'Disagree' or 'Neutral' were selected.

Conclusions: Interest with respect to inclusion of introductory quotation may vary inter-individually. However, it may hold its own distinctive sub-niche in medical education.

Key Words

Chemical Pathology; Clinical Biochemistry; Education; Witty Introductory Quotes; Communication

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Introduction

Many people, both from the general population and some medical professionals, enjoy reading or posting on social media so called 'inspirational quotes'. The hypothesis tested is, if inclusion of a relevant witty introductory quote, prior to commencement of a lecture or tutorial, would be of interest to students.

Methods

The statement 'I am inspired to listen and know more by a witty introductory quote or statement' was included in a validated medical student questionnaire. This statement was also tested in pilot in a school-aged students' questionnaire but was later removed from the final questionnaire due to poor post-test reliability in this age group. The statement querying preference towards witty quote inclusion was later repeated in another shortened questionnaire distributed after a weekend seminar in chemical pathology to medical students. Quantitative analysis of the responses was first undertaken followed by more detailed analysis of

the predictive nature of variables with respect to interest in chemical pathology.

Results

From the first medical student cohort, 35.7% agreed that a witty introductory quotation would be helpful to stimulate their attention with respect to the medical topic at hand, whereas 33.3% expressed neutrality on the matter (n=88). There were fewer responses at both extreme ends of the spectrum, with 15.5% strongly agreeing and 3.6% in strong disagreement. The remaining 11.9% selected 'disagree'. When factor analysis was undertaken here, the factor loading for this variable was 0.233. During mathematical model fitting to the medical student data, witty quote inclusion was found to be a significant predictor of interest in chemical pathology. However, non-intuitively, it was noted during model analysis and calculation that 'Quote Inclusion' was more predictive of greater interest in the subject of chemical pathology when 'Disagree' or 'Neutral' were selected when compared to the individuals who were in agreement.

A possible confounder contemplated was that the Likert-like scale options for the statement on the introductory quote did not mirror the previous questions on the questionnaire and was partially reversed. In spite of this, given a significant proportion of responders selected 'Neutral/neither agree nor disagree', bias due to automatic random repeat ticking was less likely, and the overall response trends were consistent.

For the school student questionnaire the statement "I am inspired to listen and know more by a witty introductory quote or statement" was removed from the post-pilot school age student questionnaire, given it was not well understood by some school students in the pilot phase study.

In the shortened questionnaire distributed after a weekend chemical pathology seminar, the order of the Likert-like scale responses with respect to witty quote inclusion was changed somewhat to mirror the order of the preceding questions.

The introductory quotes were subsequently included at the beginning of each individual chapter in a chemical pathology book which was drawn up for this purpose¹. The three witty quotes included at the beginning of each chapter were of thematic relevance to the medical content of the respective chapter itself, however being presented in a more literary and artistic context than the actual advancement of the medical knowledge per se, which was the role of the subsequent chapter content.

Discussion

It is commonplace for many individuals to demonstrate an interest in inspirational or witty quotes, usually taken from books or previously stated by prominent figures. It is also common to see people share inspirational quotes both within a household setting, school or work environments, as well as a definite emerging trend of sharing posts on social media which incorporate motivating quotations. A cohort of individuals feel that use of such inspirational quotations may have the power to help better focus and reshape one's thought processes, enhancing one's personal output and potentially improving outcomes. Different individuals tend to relate differently to the diverse inspirational quotes in circulation, and most people tend to have either a personal favourite or a few personal favourite quotations to which they relate on a deeper level.

Some more creative individuals may at times come up with their own personal motivational quotes, moulding one's emotions and usually being somewhat target directed. These inspirational

quotes may hold some potential towards subconscious conditioning, are usually brief and hence quicker to recite when compared to short stories, and hence less time consuming when compared to digesting stories and other concepts or ideas. This research looked into the hypothesis as to if such targeted inspirational quotations may hold a valuable role in medical education, more specifically, in this instance the education of a particular sub-speciality, namely chemical pathology or clinical biochemistry.

As with the general population trend, where uptake of use of inspirational quotes in daily lives varies from individuals to individuals, a similar trend was also observed with respect to the medical student cohort of respondents, where different individuals favoured it to various extents. Some showed neutrality and a smaller proportion even disagreed that it would play a role in gaining their attention with respect to a medical topic at hand. A heterogeneous response was hence observed, with, however the greatest proportion being in favour. The significant number of respondents who were indeed in favour of implementation of witty introductory quotes to rivet their attention with respect to the topic at hand might indeed benefit from similar inclusions. Bearing in mind the fact that a lecture or tutorial session is a time-constrained entity of usually one hour or 45 minutes in general, some may opt to include brief quotations at the beginning or at the end of these sessions. However, given the actual medical content is more important, and opinions on use of inspirational quotes in this setting vary, another option is to include brief witty relevant quotes at the beginning of a chapter in a relevant textbook. In the latter case, those who are interested and have some more time can read through them first, whereas others who prefer may quickly skip that designated page and move on to the medical and scientific content proper.

Insightful and thematically relevant quotations have been employed in various disciplines²⁻⁹. Quotations have been praised by many¹⁰. Some people think that thought patterns may be more purpose driven and modulated via inspirational quotes, whereas others may believe that these are none other than uselessly impressive and 'made to be' attractive assertions of little empirical value. In an era of ever improving technology and knowledge base, will medical quotations on the board find a cognitive role such as inspirational quotations on the fridge door did once? ^{11, 12} Quotations, after all, may be construed by some as 'borrowed ideas'¹³. The different opinions on the matter, with some claiming inspirational quotes to be nothing more than pseudo-profound, to the others who view them as having philosophical roots and being truly attractive

and profound, were reflected in the heterogeneous responses elicited. However, irrespective of this, and in view of the greatest response category being indeed in favour, a witty introductory quote may indeed have a role to play in medical education¹⁴. From quotations on the cover page of a journal, to introductory quotations in a chapter of a book, this culture has been seeping in gradually over the years, to various degrees¹⁵⁻¹⁷. The acoustic nature of brain stimulation when responding to inspirational quotes has also been looked into and compared amongst others to monotonous direct speech^{18, 19}. Relevant introductory inspiration quotes, may also be a vehicle to bridge the gap between medicine and literature, and move into the realm of the medical humanities²⁰. It is also of note that, in spite of the greatest proportion of participants being in favour of quote inclusion, the model of prediction of interest in chemical pathology was more positively predictive when these variables were selected in the 'disagree' and 'neutral' categories. It is worthy of note that this statement/question was just one of many stems presented in a questionnaire, where ultimate interest in the subject of chemical pathology was computed against a given number of the multiplicity of variables.

Conclusion

Interest with respect to inclusion of introductory quotation may vary inter-individually, however may hold its own distinctive sub-niche in medical education.

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