MEDwave

Essays
Medwave 2017 May;17(4):e6961 doi: 10.5867/medwave.2017.04.6961

The sum of us: considerations on physician-industry relationships

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Citation: Flores Rebollar A. The sum of us: considerations on physician-industry relationships. *Medwave* 2017 May;17(4):e6961 doi: 10.5867/medwave.2017.04.6961
Submission date: 17/3/2017
Acceptance date: 17/5/2017
Publication date: 26/5/2017
Origin: not requested
Type of review: reviewed by four external peer reviewers, double-blind

Key Words: conflict of interest, Sunshine Act, ethics, financial relationship, industry interaction, academic, disclosure, financial

Abstract

This essay describes critically the physician-industry relationships and how the latter influences economically in the realization of continuing medical education (CME), industry expenses in sponsoring the academic events of medical societies, travel costs and enrollment, payment for consultants and speakers. It also refers to the movements that have been created in the academic world to counteract this influence, such as No Free Lunch (Spanish version "NoGracias") and PharmFree. And the struggles between major scientific medical journals, with editorials and among editorialists on the concept of conflicts of interest. All this seen through the existence of an academic institution in Mexico and the exemplary life of one of its members.

Introduction

"If I have seen further, it is by standing on the shoulders of giants"
Isaac Newton

In 1994, at the annual film festival of the *Cineteca Nacional* in Mexico, I saw a very interesting and different movie: *The sum of us (Australia, 1994).* The movie dealt with the very good and close relationship between a father and his homosexual son. The story is an example of understanding, tolerance and love. The actors constantly break the fourth wall and the protagonists maintain a continuous dialogue with possible spectators. In one of the dialogues, the father explains the reason for his unconditional love for his son. The reason is because his son represents all his generations, he encompasses a part of all that he loves and longs for, he is the mirror upon which he sees himself day after day: "it´s simple -said the father- my son is the sum of us".

I never forgot that short sentence and today, I recall it anew, even more intensely, for several reasons. I have become a father for the first time and I have begun to recognize in my young daughter, those genetic and behavioral traits that are mine and now hers, many of which will serve her well in life while others, perhaps not so much. Within that reflective state prompted by paternity or due to the nostalgia for my fleeing youth, I have been remembering my Professors of Medicine and, why not? Also, professors of Life.

But I particularly recall those that significantly imprinted my academic and professional life, those that transferred part of their 'academic DNA´ to me, those that are part of my sum. The first to immediately come to mind is Dr. Juan A. Rull Rodrigo (1933-2010).

I first met him in 1991, as a medical intern at the National Institute of Medical Science and Nutrition, in Mexico City. At the time, Dr. Rull was Head of the Department of Diabetes and Professor of Endocrinology. Hospital Rounds were a total spectacle, as he spear-headed a brimful group of physicians including Assistant and Associate Professors of Endocrinology and Diabetes, residents in Endocrinology and Diabetes, residents rotating in our service from other hospitals and young graduates completing their mandatory Social Service; we were known as "Dr. Rull and his 17-ketosteroids".

An atmosphere of skepticism could already be felt at the National Institute of Medical Science and Nutrition; a critical attitude prevailed when reading medical literature as well as an analytic stance when confronted by day to day medical activities. This was no surprise since we had always been critical and analytical, spurred by young graduates that had returned from various countries in the early 80´s. They had trained in epidemiology in the Department of Epidemiology and Biostatistics at McMaster University in Canada; still others, had worked with the great American epidemiologist Dr. Alvan R. Feinstein at Yale University and at the University of Virginia in Charlottesville, USA.

In 1988, the Department of Clinical Epidemiology and Biostatistics at McMaster University asked them to translate into Spanish their famous series of articles on How to Read Medical Journals, published in the Canadian Medical Association Journal; the series was subsequently published in our institutional journal, *Revista de Investigación Clínica*, [1] and became the official Spanish version to be distributed throughout the country and in all Spanish-speaking countries: thus were introduced the early concepts of 'Evidence-based Medicine´, long before they were "kidnapped" by the industry [2],[3].

Several cases can clearly exemplify this "kidnapping" and evidence manipulation: a well-documented instance that won a lawsuit against the pharmaceutical company, was that of gabapentin [4]; more recently, we may refer to the case of oseltamivir, that appears to have a minimal or total lack of impact on the development of complications due to influenza (pneumonia) [5],[6]. This case generated a public dispute between members of the Cochrane Collaboration, the editors of the *British Medical Journal* [7] and British intellectuals [8]against the producers of the drug, alleging the manipulation of clinical trials and the concealment of unpublished clinical trial results [9],[10].

Actually in 1995, when I was admitted into the National Institute of Medical Science and Nutrition, during my 1st year of Residency in Internal Medicine, part of the first "batch" of articles to be read included copies of a special edition of How to Read Medical Journals, in Spanish, that were part of the course in Internal Medicine.

By then, Dr. Rull was now the Institute´s Medical Sub-director and in spite of this most absorbing position, he still managed to balance his time and continued to practice clinical teaching, which he did exceptionally well. Obviously, Dr. Rull was a very peculiar man, of brilliant intellect and an ability for critical thought that bordered on irritating.

Aside from holding the position of Medical Sub-director, Dr. Rull was still the Head Professor of the course in Endocrinology and he was not only always present at all Endocrinology meetings and sessions, but also at those scheduled for Internal Medicine residents. Dr. Rull was always recognized as the great educator of endocrinologists both national and Latin-American, as well as the founder of our country´s school of Endocrinology, distinguished by its personality, prestige and national presence. However, his contributions to the formation of many generations of Internists has not been appropriately recognized; teaching Internal Medicine at our hospital was one of his passions, and weaknesses.

Our hospital is one of the largest nerve centers in Mexico destined to the study of Internal Medicine and endorsed by the National Autonomous University of Mexico. During Dr. Rull´s last years, 30 residents were admitted to the 4-year Internal Medicine Residency. Our Institute´s philosophy is to promote the fulfillment of the necessary credits to complete the specialty of Internal Medicine before entering a subspecialty. This remained so throughout Dr. Rull´s tenure.

His influence on our education as internists was avant-garde and fresh; perhaps it followed the concepts and reforms established by Dr. Rull´s close friend and colleague, Donato Alarcón-Segovia, the Institute´s General Director at the time. This "renaissance" to which he referred in a deeply felt posthumous tribute to Alarcón-Segovia [11], reflected not only his essence but also that of Dr. Rull.

His primary teaching during hospital rounds, was to emphasize that the physician-patient relationship is fiduciary in nature and that physicians are capable of promoting patient well-being with the greatest of loyalties while protecting the patient´s interests above all else.

One of Dr. Rull´s concerns was to protect Internal Medicine residents from the pernicious mercantile influence of the pharmaceutical industry; he strictly prohibited the lunches they offered to provide, he restricted the representatives´ hospital visits to a couple of days a month and he did not allow them to enter the residents´ work areas. This attitude vis-á-vis the pharmaceutical industry was adopted while he was the Sub-director between 1992 and 2010, and long before it became prevalent in several American institutions and universities; and especially, long before the *No Free Lunch* movement appeared in the year 2000 [12], and the founding of *PharmFree* by the American Medical Student Association in 2002.

Dr. Rull´s position on medical relations with the pharmaceutical industry was extreme, and the more distant, the better. These rules applied to all, physicians in training (residents) as well as those attending physicians affiliated to his Sub-direction. Neither subscriptions to meetings, trips, hotel stays, nor expenses for continuous

medical education courses were accepted or sought if sponsored by the industry.

As the critical thinker that he was, Dr. Rull already believed at the time that attending meetings was futile due to their loss of formality, scientific rigueur and were hence, only an extension of the pharmaceutical industry´s marketing schemes. Residents were only encouraged to attend if they were presenting the results of their research. Although controversial, this idea has been under discussion in recent years in different publications [13],[14],[15],[16],[17].

This vision, appearing to originate from extreme skepticism, is based on a disturbing reality; over half of conferences, meetings, courses and all continuous medical education activities [18] are sponsored by companies in the pharmaceutical industry and those promoting medical devices. The pharmaceutical industry snatched control of continuous medical education many years ago, from academic medical societies [19].

Meetings are organized at the latest and most fashionable resorts or beaches, in large luxury hotel complexes, in which the sponsoring industries pay for the expenses of hundreds of physicians [20], including their subscriptions, airline travel, hotel stays, tickets to shows (theatre, dances, etc.…). The sponsors are free to choose the meeting´s topics, recommend "speakers" [21], and insert their symposia or luncheons with the "experts" [19].

The question is, what form of knowledge can be conveyed in such a setting? [22]; and the next question is, "who"pays for all of this? As Ray Monihan asked, who pays for the pizza? [23]. The answer is obvious, all expenses are transferred to the industry´s products and thus to their final destiny, our patients.

In the year 2000, it was determined that the industry sponsored over 300 thousand pseudo-didactic events [24], with an annual budget of three billion dollars for continuous medical education, of which more than half originated directly from the industry [18]. In 2004, an American national survey on the relations between physicians and the pharmaceutical industry, revealed that 35% of respondents received refunds from the industry for admission to meetings and expenses resulting from attendance to continuous medical education courses and conventions (subscriptions, trips, stays, meals, etcetera); 28% were payed for services rendered ("consulting", "speakers", recruitment of patients for clinical trials) and 83% ate for free at their workplaces [25].

Although from different cultures and with distinct idiosyncrasies, the few studies on the subject conducted in Latin America have reported similar results; significant interaction between physicians and the industry has been observed [26],[27], and most consider it is appropriate to receive some benefits from the pharmaceutical companies, including payment for various services. This relationship is very common between physicians and the industry and well-viewed by the community and medical societies, but if extrapolated to another professional milieu, it would be judged with suspicion and mistrust [26],[28].

During the first two years after the Sunshine Law (the aim of this law is to make financial relations between physicians and the industry more transparent) was enacted in the USA, Medicare and Medicaid reported that the industry paid 7,500 million dollars to 618,931 physicians and 1,116 teaching hospitals in 2015. These payments included 3,900 million dollars for research and the rest, 3,600 million dollars, were used as consultant fees, payment of lecturers and other expenses [29].

In this vein, I still recall that morning as one of many, after doing rounds, Dr. Rull was discussing all the recent salient notes and articles in Internal Medicine journals, The New England Journal of Medicine, The Lancet, British Medical Journal, Journal of American Medical Association, which he had already reviewed in the early hours of the day (among which his favorite, were undoubtedly those from Britain); he would stand, holding his coffee cup in his hand and in the middle of our meeting room he would ask "have you seen this week´s British Medical Journal?".

That particular day, he was referring to a special issue published on May 31st 2003 (vol. 326; 7400) titled "Time to untangle doctors from drug companies", coordinated by Ray Moynihan. The front cover depicted the medical-industry relation as pigs and reptiles in a very comical, even hilarious, parody that broke the morning´s calm.

The saying that "an image is worth a thousand words" is quite true, but Gonzalo Cancino described that cover brilliantly [30]. I have yearned for those mornings; a few months ago, I could have shown him an excessively "sentimental" Journal of American Medical Association editorial on the proposal to change "conflict of interest" into the euphemism "confluence of interests" because he would have considered the term "conflict" pejorative! [31].

I would have expected all the sarcastic comments he had in his pocket; I can imagine him with his very particular smile and both hands in his white coat front pockets, telling me: "as if a declaration of conflicts of interest were a *Confiteor* that cures everything" and most certainly, a "declaration of conflicts of interest" solves no conflicts and only becomes a moral license for authors [32]. But as Dr. JR Laporte referred: "In the end, conflicts of interest do not exist; they are only interests".

However, these "declarations" may become so extensive and occupy so much space that they may trigger editorial registration problems and in Marcia Angell´s case, the ex-editor of the *New England Journal of Medicine*, goad her to write an editorial on the subject [33].

ProPublica, the American NGO for investigative journalism, created a public access database on payments to physicians known as "Dollars for Docs", while benefiting from transparency laws; at the time, any citizen (patient, reader of the researcher in question) could review payments received from drug companies and their itemization: meals,

trips, consulting services, conferences, etcetera; this information undoubtedly impinged on the credibility of those physicians consulted in that platform (https://projects.propublica.org/docdollars). The impact of this policy and of transparency programs in the USA has not been recently measured, although there is a declining tendency in the existence of the physician-industry relationship according to the last national survey conducted in that country [34].

But I do not know what Dr. Rull´s answer would be after showing him the series of articles by Lisa Rosenbaum published in the New England Journal of Medicine, on conflict of interests [35],[36],[37], in which she attempts to persuade us that there is a lack of evidence proving that the interaction of physicians and the pharmaceutical industry is damaging, although numerous tests contradict her [24]. Or if he saw her reiterative use of derogatory neologisms, nothing academic, or "pharmascolds" (term used for those of us bemoaning the pharmaceutical industry´s influence over medical decisions). Perhaps his response would be short: "nothing to worry about, she´s only a *merolica**", [38].

*Merolico, Mexicanism according to the dictionary of the R.A.E.: 1. Street healer; 2. Charlatan (peddler). The term was coined by Rafael Juan Meraulyok, possibly a physician of Swiss origin that settled in Mexico in the XIX century. He was famous for his presentations in public in which he duped passersby with fake cures and miracle remedies. The difficulty of the illiterate population in pronouncing his name gave origin to the word and to its popularity.

Besides, she has received harsh criticism for those articles, so joining the feast would be inhumane" [39],[40],[41],[42],[43],[44]. The least punishing critique of Lisa Rosenbaum´s articles, was written by Richard Lehman in the British Medical Journal Blog: "It's a stream of consciousness narrative in which she struggles to persuade us that all this talk of bias harming patients is a naughty lie and that we should demand more evidence. It's quite sweet but I'm not sure what it is doing in a leading medical journal" [45]. But the most stinging response was that from the former Journal of American Medical Association and the New England Journal of Medicine editors, bringing Lisa Rosenbaum´s absurd rhetoric to the forefront in a British Medical Journal editorial and masterfully questioning her position with the common sense, reason and skill only provided by age [28].

I most definitely miss Dr. Rull, his mornings of scrutiny and academic review, his sharp and critical intellect and his always disquieting skepticism. I always believed, as I make a comparison with the neologism coined by Petr Skabanek, *Scepticaemia ("an uncommon generalized disorder of low infectivity. Medical schools education is likely to confer life-long immunity.")* [46] that several Internal Medicine residents if not most, were temporarily or permanently infected by our Internal Medicine service and the "septic focus" was Dr. Rull.

The impact that a man can have on the life of another is incredible, and I live it year after year and reunion after reunion; when different members of those past generations get together, our recurrent conversation themes revolve around Dr. Rull; in every anecdote, in every joke and in every story of the best part of our lives, he is embedded as the fundamental piece. He is part of what has been termed in medical education as our "hidden" curriculum.

That conscious or unconscious manner [47] in which educators also convey to future physicians, those rules and values that are often not contemplated in formal curricula [48]. The "hidden" curriculum is vital to clinical education. It is the mechanism through which the wisdom of clinical practice is imparted, and the student´s abstract knowledge and abilities are commuted into the functionality of clinical practice [49]. But perhaps, the "hidden" curriculum´s greatest bearing (as dynamic and omnipresent as to rarely be hidden) [50], is its contribution to medical professionalism.

Conclusion

Much has been discussed and written on professionalism in medicine and how to teach it [51], but perhaps it cannot be taught…maybe one can only inspire. A major contribution by Dr. Rull to our clinical practice is that of autonomy as the axis of professionalism [52], the freedom and Independence from those secondary interests [53] that day to day, torment most physicians around the world.

Notes

From the editor

The authors originally submitted this article in Spanish and subsequently translated it into English. The *Journal* has not copyedited this version.

Declaration of conflicts of interest

The author has completed the ICMJE declaration of conflicts of interest form, and declares that he has not received funding for the report; Not having financial relationships with organizations that may have interests in the published article in the past three years; And not having other relationships or activities that could influence the published article. Forms can be requested by contacting the responsible author or the editorial board of the Journal.

Financing

The author states that there were no external sources of funding.

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