Fisher’s Rules

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C. Miller Fisher is a clinician whose methods and style deserve the same attention given his accomplishments. The 17 “rules” presented herein summarize some of the basic principles he has followed in the practice of medicine.

The unique capabilities of C. Miller Fisher as astute observer and describer of clinical phenomena, pathologist, investigator, and physician were appropriately recognized by his colleagues and students on Fisher Day, Sept 7, 1980, during a celebration marking his formal retirement. His many accomplishments and publications, especially in the field of cerebrovascular disease, were dealt with by Adams and Richardson. As has been true of clinicians in former eras, the legacy of Dr Fisher’s methods and style may prove just as important and enduring as his scientific advances.

Change in medical and technical knowledge is so rapid that we accept constant flux as a fact of life. The Queen of Chess in Lewis Carroll’s Alice in Wonderland put it aptly, “Now, here, you see, it takes all the running you can do just to keep in the same place.” This constant state of change means that some of today’s “brightest advances” may be labeled tomorrow as yesterday’s mistakes. If gains in knowledge are so fleeting, how then do we make our mark on the future? Dr Fisher, as a student and teacher, conveys to colleagues, and students, by his words and personal example, a way of procedure, a methodology. I have chosen to call his method “Fisher’s Rules” because he is fond of organizing clinical phenomena into well-ordered patterns and will frequently ask, “does this patient’s findings fit the usual rules for a lesion in this anatomical region?” These rules are described herein for those not fortunate enough to have worked with this master, in hope that they may serve as guides for the apprentice clinician. Those who know C.M.F. well will recognize that he did not actually state many of these rules; they are inferred from his behavior and his example.

1. The bedside can be your laboratory. Study the patient seriously. Clinical observation takes time and patience. The method of clinical observation should be just as rigorous as that of the laboratory bench. Generate hypotheses from your history and observations, and then proceed to devise tests applicable at the bedside that will corroborate or disprove your ideas.

2. Settle an issue as it arises at the bedside. Whenever possible, don’t leave a “maybe.” The situation may be quite different tomorrow, so that the opportunity to answer an important question will be lost. A loose, indefinite formulation of the clinical problem is usually not improved or clarified by laboratory investigations.

3. Make a hypothesis and then try as hard as you can to disprove it or find the exception before accepting it as valid. C.M.F.’s publication or formal statement of a concept often appeared years after the idea was originally generated. During that time, he would test and retest the idea to uncover its weaknesses and pitfalls, always trying to “trip it up.” He was also wary of stating ideas that had not stood the test of time and inquiry.

4. Always be working on one or more projects; it will make the daily routine more meaningful. Once a hypothesis has bloomed, collection of data at the bedside or in the clinic can begin. Even patients whose problems do not relate to the study at hand can sometimes serve as controls. Also, “normal” patients can teach how a task is ordinarily approached, a story analyzed, or a picture interpreted. One can gain from any clinical encounter.

5. In arriving at a clinical diagnosis, think of the five most common findings (historical, physical findings, or laboratory) found in a given disorder. If at least three of these five are not present in a given patient, the diagnosis is likely to be wrong.

6. Describe quantitatively and precisely. From a verbal or written account of the findings in a given patient, others will need to picture what has been found. Furthermore, when the patient is reexamined months or years later, you will need to compare the findings with your own prior description. “The patient, while supine, could lift his leg to a height of 6 in for 10 s,” gives a visual picture far superior to a simple statement that the leg had moderately severe weakness.

7. The details of the case are important; their analysis distinguishes the expert from the journeyman. For example, an exacting account of the pace of a stroke frequently helps separate hemorrhage from occlusive disease.

8. Collect and categorize phenomena; their mechanism and meaning may become clearer later if enough cases are gathered. Scattered over, under, and
on C.M.F.'s work area are untold manilla folders containing collections of unusual signs, historical accounts, or unique or poorly understood observations. The headings on these folders might read, "patients who write off the paper," "intermittent interruption of behavior," "nonsense speech," "in-persistence," "mumbling," "oval pupils," "unusual movements ipsilateral to a cerebral lesion," "laughs," "smiling while talking of feeling sad." If we have not collected our observations as we go along, they are often impossible to retrieve later.

9. Fully accept what you have heard or read only when you have verified it yourself. Whenever possible, test the ideas of others before embracing them as valid or quoting them. The literature and dogma of medicine are filled with hearsay, half-truths, and imaginings. Misinformation and poorly tested "facts" are frequently passed along in rote fashion from one generation to the next.

10. Learn from your own past experience and that of others (literature and experienced colleagues). C.M.F. knows and reverses the history of ideas and the contributions of others. As Osler had noted, "to study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all." C.M.F. can frequently be found in the evening among the stacks of one or another of the medical libraries in Boston. Each generation cannot relive the history of neurology. Take advantage of what has been already clarified in the past.

11. Didactic talks benefit most the lecturer. We teach others best by listening, questioning, and demonstrating. C.M.F. would often casually question bright students months after they attended one of his lectures or after a particularly good talk they had heard together, attempting to gauge retention of the material presented. Often the cardinal points had been forgotten or never learned. We recall best facts and concepts that we ourselves have struggled to obtain.

12. Write often and carefully. Let others gain from your work and ideas. C.M.F. set a goal of producing at least one major and two minor reports each year. This gave him time lines to aim for that he invariably surpassed but seldom lagged behind.

13. Pay particular attention to the specifics of the patient with a known diagnosis; it will be helpful later when similar phenomena occur in an unknown case. Many clinicians stop acquiring information when the diagnosis becomes clear; for them, the object of the clinical encounter is simply to make a diagnosis. Listening to detailed descriptions, for example, of visual phenomena in known migraineurs may prove invaluable when confronted later with a patient with an unusual undiagnosed visual experience. Compare the unknown with the 100 prior migrainous visual accompaniments: does it fit the rules?

14. Be a good listener; even from the mouths of beginners may come wisdom. C.M.F. frequently questioned students, fellows, and colleagues and patiently listened to their replies in hopes of gleaming new thought or insight.

15. Resist the temptation to prematurely place a case or disorder into a diagnostic cubbyhole that fits poorly. Allowing it to remain an unknown stimulates continuing activity and thought. C.M.F. has an uncanny knack for recognizing the unusual patient or the facet of the case that did not quite conform to the rules. He is also keenly aware of the limitations of present medical knowledge. Identifying the unique case led to further analysis and frequently a report of a newly defined condition or variant.

16. The patient is always doing the best he can. Be supportive. Never become angry with a patient or his family.

17. Maintain a lively interest in patients as people. C.M.F. also collects people with unusual attributes, for example, a man strong enough to lift a small car, families with a history of impressive longevity, fat people who enjoy excellent health, people who succeed at unusual occupations. His interest in people also extends to his students, residents, fellows, and colleagues. He is never too busy to discuss a vexing clinical problem, share ideas about a new medical advance, or simply talk about the recent news of the day. Perhaps his success as a clinician partially reflects his more general interest in humanity and its trials, tribulations, successes, and sufferings.

References