EDITORIAL
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Can We Calculate Patients' Compliance and Forecast Their Adherence to Medication: Cultural Adaptation of the Korean Version of a Compliance Questionnaire for Patients with Rheumatoid Arthritis

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Rheumatologists are infamous for prescribing numerous medications. When our patients talk about how doctors in different department are overwhelmed by the loads of medications, we rheumatologists share the same feelings of guilt and indignation. Because of its progression and unique nature, rheumatic diseases, such as rheumatoid arthritis, require multiple drug-regimen rather than single drug regimen, even in the early stages. Hence, initial prescriptions of "strong" medications like immunosuppressant are common practice and important in lieu of treatment guideline. It is not surprising to prescribe more than 6 medications when we rheumatologist add anti-inflammatory drugs, heart burn medications, and not to mention rheumatologist's "favorite" steroids. Moreover, rheumatoid arthritis' systemic complications like osteoporosis require even more additional prescriptions of calcium and bisophosphonate. Having said that, the rheumatologists are usually perceived as the "blind prescriber," even when they prescribe something that can alleviate adverse effects like folic acid alleviating the methotrexate adverse effect. Frequently, the total number of medications rheumatologists prescribe exceeds single digit. When patients experience severe pain and totally depend on their physicians, prescribing myriads of drugs poses no problems. Ironically, the real problem arises as the patients' pain is well controlled. Imagine the patients with no apparent symptoms are looking at the pills in their palm. Patients begin to doubt and begin to question their prescriptions. "Will these medications make a nasty stomachache?" "I have heard that steroids are bad." "Is it really necessary to take these pain killers all at once?" This is exactly when patients' compliance begins to decrease. This is only the start as the real predicament arises. Because of effects of the medication appear slowly over the period of 4-5 months, skipping the drugs for once or twice will not change anything. In fact, forgetting taking medication once or twice will not aggravate any symptoms. However, as the patients habitually skip their medications, the rheumatoid arthritis exacerbations can occur. Doctors who do not recognize this prolonged poor compliance will obviously add more drugs or substitute old prescriptions with newer and stronger medications, thinking that old medications do not work.

Consider this. Symptom exacerbation and consistent joint pain is acceptable because pain can do some good by bringing more medical attention and by preventing patients going astray from the therapy regimen. However, alleviation of symptom can tempt patients not to take the regular medications and creating the endless exacerbation-alleviation loop, which can cause the irreversible damage to the joint structures and function.

Hence, it is strategically important to predict patient's compliance to prevent patient's doubt and ultimately the vicious cycle of exacerbation-alleviation, as I mentioned above. Also, unnecessary prescription of expensive drugs to prevent medical bills and demands are still in current medical opinions. As early as 1990s', other countries took initiative to take survey from the rheumatic patients in

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order to estimate patients' compliance and through some clinical trials, it proved its efficacy in predicting the compliance. For instance, the well-known patients' compliance measures are Belief about Medications Questionnaire (BMQ) [1] and Compliance Questionnaire-Rheumatology (CQR) [2,3], which were developed in England and in Netherland, respectively. The paper published in this issue discusses the efficacy and validity of Korean-version of CQR by Lee EB, et al. Questionnaire based surveys contain questions that are unique to that culture; that is, depending on location of the questionnaires, survey will unintentionally imbue some of the cultural backgrounds. Hence, the very first step in the application of questionnaire based survey into the Korean rheumatology clinic is to modify the questionnaires to "fit" into the Korean cultures. Having said that, the culturally modified CQR, also known as the Korean CQR (KCQR), appropriately corresponds with the original CQR, and it will probably be useful in the real clinical settings in Korea.

I propose that in order to improve patients' compliance, the process must be in terms of before the treatment, during the treatment, and after the treatment (Fig. 1). Patient's trust in medication plays a crucial role in influencing the patients' compliance. Some reports claim that the trust in medications influence the patients' compliance more than socioeconomic factors and clinical factors combined. Then, it is obvious that doubts in medication will lower the needs for the medication and hence the compliance. Recently, floods of incorrect information from the internet have negatively influenced patients' trust in medication and compliance. It is our social responsibility to correct the wrong information. When we treat patients, we can utilize the KCQR and other means to predict the compliance. We can study patient's compliance so that we can correct the misunderstandings patients may have and formulate medications that optimize patients' need as well as patients' compliance. Even after the prescription is made, there are many way to follow up patients' compliance. One possibility to follow up their compliance is to take advantage of current media; namely, text messaging, internet social-networks like facebook, internet alert system, and so on. This concept can be summarized by the phrase "2C (concept, compliance) up, 2C (complication, complaint) down" - this terms are not publicly accepted, but just my thought. That is, patient's correct concept of medication will increase their compliance; thereby, reducing complication and complaint, thereof.

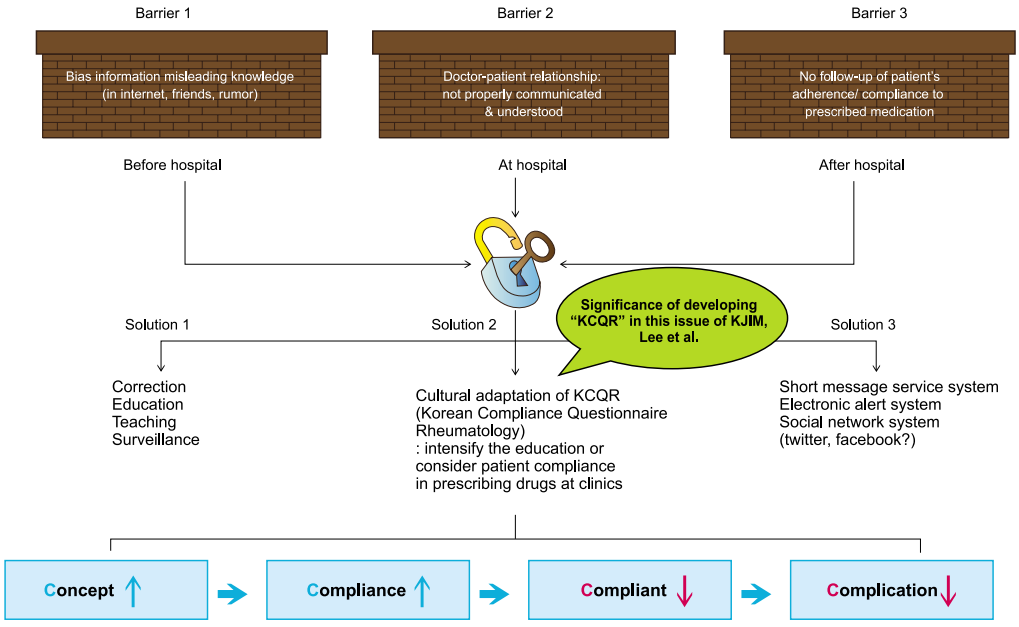

Figure 1. Barrier to well-controlled taking medication in chronically ill patients such as rheumatoid arthritis.

In conclusion, one of the excerpts from the Lee EB et al's KCQR touches my heart: “I do not expect miracles from anti-rheumatic medications.” At first, when patients are exhausted from severe pain, patients do expect miracles from their medications; in other words, they have no choice but to comply. However, once they experience the “miracle,” perhaps, it is a human nature to forget; in other words, they complain. I cannot help think about Jesus Christ who performed many miracles but at the end, betrayed by his own disciple Judas. **(Korean J Intern Med 2011;26:25-27)**

REFERENCES

1. Neame R, Hammond A. Beliefs about medications: a questionnaire survey of people with rheumatoid arthritis. Rheumatology (Oxford) 2005;44:762-767.
2. de Klerk E, van der Heijde D, van der Tempel H, van der Linden S. Development of a questionnaire to investigate patient compliance with antirheumatic drug therapy. J Rheumatol 1999;26:2635-2641.
3. de Klerk E, van der Heijde D, Landewe R, van der Tempel H, van der Linden S. The compliance-questionnaire-rheumatology compared with electronic medication event monitoring: a validation study. J Rheumatol 2003;30:2469-2475.