



Compliance Aids for a 1-0-0-1 Dose Regimen

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Persons in support

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Abstract

Background

Studies have estimated that over 30% of medication is not taken correctly. Low compliance results in increased medical costs as well as impaired health. The World Health Organization published an evidence-based guide in 2003 to improve medication adherence. Several different strategies and interventions have been established, and the reduction of the dose frequency is one strategy that has often been employed.

Objectives

My objectives are to assess issues and problems in ascertaining the degree of acceptance for compliance aids for a 1-0-0-1 dose regimen, to create an assessment tool for Brilique[®] (ticagrelor, not yet available in Switzerland) as well as to evaluate the acceptance of combining the ritual of brushing one's teeth with taking medication by means of a structured interview.

Methods

The prospective observational study was conducted as a pilot study at the University Hospital in Basel, in the Internal Medicine Department. Only those patients were recruited, who had a prescription of Aspirin Cardio[®] and had received at least one tablet during their stay, were at least 18 years of age, and understood German, French, Italian or English.

Results

A total of 153 eligible patients were registered in the study between March 23rd and May 16th sixty percent were men; the mean age was 72.9 ± 11.18 years. A total of 43 (28.1%) patients agreed to be interviewed. Seventy-two point one percent were men. The mean age was 73.0 ± 10.37 years. The mean number of drugs per day was 8.63 ± 2.83 (range 3 to 15). All of the patients interviewed had an ongoing pharmacotherapy before their hospital admission, and 55.8% of them were currently using a pillbox. The visual acuity test revealed that the majority of patients (59.1%) could read the smallest font size. On average the necessity score was a mean of 19.88 ± 4.84 (range 5-25), and the concern score was a mean of 12.30 ± 5.35 (range 5-25), indicating higher beliefs in the necessity of the medication. The self-assessed compliance over the four weeks prior to their admission was 98.32 ± 5.12 (VAS range 0 to 100). Removing an Aspirin Cardio[®] tablet and a Brilique[®] tablet was perceived as being rather easy (90.31 ± 21.90 and 92.87 ± 13.86 , VAS range 0 to 100). All of the patients accumulated at least 3/4 of the possible points with respect to the handling of pillboxes. The two favorite pillboxes proved to be the Dosett[®] and D easy. The combination with the highest amount of correctly recognized colors was D easy (red-blue) with 86.0%. The refill service for pillboxes offered by community pharmacies was seen as not being needed by 63.6%. The strength of a reminder to take medication by linking it to brushing one's teeth was revealed as low with a mean of only 24.62 ± 38.38 (VAS range 0 to 100).

Conclusion

The pillbox is a form of compliance aid that is readily accepted by patients. The preference for a particular pillbox is decided upon mainly due to its size and handling, independent of age, underlying disease or the number of daily administrations of drugs. A familiar pillbox, however, can act as a kind of bias. This is why it is so important for the first pillbox selection to be done carefully. The refill services offered by community pharmacies do not, at the moment, seem to be in demand by the patients interviewed. Brushing one's teeth is not considered an effective reminder for taking one's medication.