Internet to boost patient accrual in oncology trials? A multiinstitutional AERIO study

During the last decade, Internet has become an essential tool in private and professional life worldwide. Simultaneously, the number of Web sites dedicated to health issues and more particularly to cancer has been growing rapidly. Several studies have already reported that Internet is one of the sources of information most consulted by patients with cancer in search of health information [1-3]. In parallel, enrolment in clinical trials has become a key issue in clinical oncology and increasing accrual is highly encouraged. Companies are designing new Internet tools and Web sites to accelerate trials [4] but whether Internet can help recruit more patients is not known. A recent publication [5] indirectly suggested that USA patients use the net to gain access to trials. To address the potential role and receptivity of Internet on the enrolment of patients with cancer, we carried out a French prospective multiinstitutional study.

From January to April 2009, we prospectively assessed patients treated in the day-hospital in 12 French oncology centers (2 of which dedicated to early trials). The patients were given a 7-page questionnaire containing 28 questions regarding Internet use. Additional data were obtained through a retrospective chart review by a resident from the French Association of Residents in Oncology (AERIO; http://www.aerio-oncologie.org/). Overall, 570 consecutive patients were included in this study. Sixty-five percent of patients were women; median age was 59 years. The most common cancer types were breast (n = 224, 40%), colorectal (n = 52, 9%) and lung (n = 43, 8%). Thirty-seven percent (n = 206) were enrolled in clinical trials, 39% (n = 81) of which were phase I trials. Seventy-three percent (n = 389) of patients had Internet access at home. Fifty-two percent (n = 289) used Internet to look up information about their cancer.

Out of the 570 patients assessed, patients with breast, lung or colorectal cancer (n = 319) did not consult more Internet than other patients (53% versus 51%, P = 0.7). Among patients enrolled in clinical trials, 51% of patients enrolled in phase I clinical trials used Internet for cancer issues versus 59% of patients enrolled in phase II/III trials versus 51% of patients not enrolled in clinical trials. These differences were not significant (Fisher’s exact test, P > 0.05). The major factors predicting the use of the Web were age and education level. Seventy-two percent (n = 64/89) of patients of less than 45 consulted the net for cancer issues versus 49% (n = 225/463) of olders (Fisher’s exact test, P < 0.0001). Sixty percent (182/307) of patients with at least ‘A’ level (college level) versus 42% (99/238) of patients who have stopped studies in secondary school (high school level) used the net (Fisher’s exact test, P = 0.004). The timing of questions was of particular interest. Eighty percent of the patients (n = 265) began their research after the diagnosis of cancer but only 41% (n = 136) began before the treatment decision or inclusion in the trial. Overall, 78% of patients thought that Internet was a reliable source of health information. Nonetheless, the main sources of information for the patients were general practitioners/pharmacists (n = 236, 65%), television (n = 152, 42%) and friends/family (n = 100, 27%). Patients have three wishes for Internet use: to access to their health data (n = 195, 61%), a Web site with information about treatment and trials validated by oncologists (n = 189, 59%) and to contact their healthcare providers (n = 160, 50%).

In conclusion, patients enrolled in clinical trials do not consult Internet more frequently than other oncology patients in France. Nonetheless, they consider Web information reliable but insufficient. For 65% (n = 61) of patients who were proposed to be enrolled in clinical trials, Web information was insufficient to help them chose to enter a trial. Seventy-three percent (n = 232) of patients would like to have access to a Web site with information relative to clinical trials. Thirty-three percent (n = 103) would not trust this site if promoted by industry. Web sites designed for the public containing information on clinical trials may be useful to increase clinical trial accrual.

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