

# Written Information Improves Patient Knowledge About Implanted Ports

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**Background:** Implanted ports are frequently used for patients with cancer who require IV chemotherapy. In addition to verbal communication with healthcare providers, patients with cancer may benefit from written information.

**Objectives:** This pre/post study evaluated the effectiveness of an informational booklet by improving knowledge about ports and assessed the history, need, and preferences for information.

**Methods:** Patients with cancer who had an implanted port for at least six months were provided with an informational booklet about ports. Knowledge about ports was tested before (T0) and after (T1) patients read the booklet. Information needs and preferred sources of information were also assessed at T0. Patients reported their opinions of the booklet at T1.

**Findings:** The sample included 129 patients; 49% were male, with a mean age of 59 years. Most patients want to receive as much information as possible, preferably before the port is implanted. However, 43% of patients reported they had received little information about ports. After reading the booklet, patients' knowledge, which was measured with a validated seven-item instrument, improved from T0 to T1 ( $p < 0.001$ , effect size = 0.689). Oncology nurses, by providing written and verbal information, can increase patients' knowledge about implanted ports and their confidence in caring for their ports.

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Effective patient education and information are increasingly necessary because of demographic and health transitions, which are changing the landscape of health care. The crucial role played by patient education is associated with an increase in life expectancy and a decrease in mortality, with the increasing prevalence of chronic conditions like cancer. In addition, cuts in healthcare resources have reduced the length of hospital stays and decreased nurse staffing. Education is effective when it enhances patients' self-efficacy beliefs by activating empowerment strategies, so that patients play an active role in managing their conditions (Germino et al., 2013). They also have increased autonomy and satisfaction (Papadakos et al., 2014).

Patients with cancer need information about different aspects of the disease and its treatment, and nurses are important

providers of information (Koutsopoulou, Papathanassoglou, Katapodi, & Patiraki, 2010). Nurses in this role may help to improve quality of life for patients with cancer and contribute to cost reduction (De Lorenzo et al., 2004).

Providing information is not always a standardized or simple process for nurses. Healthcare professionals' beliefs about information priorities often differ from those of patients' (Capirci et al., 2005). In addition, information needs vary according to patients' characteristics, such as age (Pinto, Chaves, Lourenco, & Mari, 2004), length of time since diagnosis, physical condition (Sainio & Eriksson, 2003), and income (Al Qadire, 2014). Therefore, a careful assessment of patients' preferences and information needs is crucial for effective improvements in health literacy.

Many studies have investigated patients' information needs and found that most patients would like to receive as much