

Open Window: a novel method of reducing isolation during Stem Cell Transplantation or treatment of Haematological Malignancies

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Stem Cell Transplantation (SCT) and treatment of Haematological malignancies requires long periods of isolation from friends and family. Patients may be in a single room for up to 6 weeks continuously. High dose chemotherapy with or without Radiation produces severe toxicity. This is combined with fear as the outcome is uncertain and death may result from SCT related complications. The sense of fear is compounded by isolation, which may lead to depression, aggressive behaviour to staff and family and refusal to take part in the medical and nursing aspects of the patient's care. In an attempt to overcome these problems 'Open Window' was developed. Adult patients undergoing SCT or high dose chemotherapy for haematological malignancies in the Denis Burkitt National Blood and Bone Marrow Transplant Unit at St James's Hospital were invited to participate. Open Window describes a system, consisting of ceiling mounted LCD projectors, presenting images, which appear as a digital or virtual window in the patient's room. A high quality sound system to create a fully 'immersive' environment is included. All patients are nursed in a single 'en-suite' HEPA filtered room equipped with this system. Access to all images and computer-derived programmes is via a 'single click' controller to facilitate ease of patient use. Patients have access to two channels. The first channel contains pre-recorded DVD images accompanied by specially commissioned music. Images are held for periods of minutes creating a particularly relaxing ambiance. The second channel allows the patient to view images, which are created by invited artists and sent to 'Open Window' in real time via a mobile imaging phone. Artists have been commissioned and have created images from their studios and from nature. Patients have given consent and all images are pre-screened before transmission. A psychological assessment is undertaken during the patient's stay in the SCT unit. Qualitative data will be collected by unstructured interview in the patient's room, will be audio-taped and will last 30-60 minutes. A triangular approach will be used to ensure confirmation and completeness of data. Patients undergoing similar treatments in rooms not equipped with 'Open Window' will serve as a control group. This project has been developed in conjunction with Media Lab Europe, 4th Promise Media and has been financially supported by InFocus, Vodafone Ireland, Paragon AV, Eircom, Apple Computers and The Bone Marrow for Leukaemia Trust.