Provision of Information on Concussion to Patients and Families by Videotape

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ABSTRACT

Traumatic brain injury (TBI) is a major health problem in New Zealand that results in death and disability as well as a substantial number of mild injuries. Information provision is an important part of interventions that can help to prevent long-term difficulties from developing after mild TBI. This study investigated whether information provision by videotape can be a useful part of interventions for mild TBI. The research was in the form of a pilot study in that a videotape and a brochure were produced as part of the study. The participants were clients of a concussion clinic and the people who accompanied them to the clinic and they were divided into three different groups. One group received the videotape and brochure, a second group received the brochure only and the third group received neither of these resources. Specific questions about information provision were developed to gather data for the study which formed part of a larger survey of client satisfaction. The number of responses from people who accompanied the clients was insufficient and that data was therefore omitted from the study. There were no significant differences between the three groups of clients in their satisfaction with information provision or the perceived level of help they received from information provision in understanding concussion. Clients who reported that they received an appropriate rather than an insufficient or excessive amount of information were significantly more satisfied with information provision. The results also suggested that clients who did not receive the resources may not have received enough information. The majority of clients preferred to receive information on both videotape and brochure compared to either resource on its own or other options and most clients who received the information resources referred to them more than once. The findings support the use of videotapes in information provision for clients of concussion clinics when they are used alongside written resources rather than replacing them. Limitations in the study and directions for future research are discussed.

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CHAPTER ONE

Introduction

1.1 Background

The original idea for this research was initiated by a recent masterate study by Moore (2001) which investigated the nature of information made available to patients and their families by general practitioners (GPs) and hospitals after traumatic brain injury (TBI) in New Zealand. Moore reported that over 90% of the hospital emergency departments who responded had a patient information sheet on TBI but less than half of the GPs had such an information sheet. The quality of the content and appearance of the information sheets was found to be highly variable and it was noted that none of the respondents had access to information in non-written formats such as audiotape, videotape or CD-ROM. This latter finding provided the impetus for an investigation into the use video in information provision for TBI.

There were a number of reasons why this topic appealed to me. I have previously worked in video production and I am still interested in video as a communication medium. My first career was in secondary education and I have maintained an interest in education in other areas both as a volunteer and paid tutor. More recently I have been studying psychology with a particular interest in clinical neuropsychology and TBI. The topic for this research provided an opportunity for me to use my experience and skills with video production and education in a study involving TBI.

1.2 Traumatic Brain Injury

Traumatic brain injury is a major health problem in developed countries like New Zealand. It places great demands on all levels of health services because it not only causes death and disability but it also results in a large number of mild injuries. The consequences of TBI for the person injured can include difficulties in many different areas of physical, cognitive, behavioural, emotional and social functioning. The most common age group affected by TBI are those aged 15 to 24 years (Naugle,

1990). These young people can face many years of disability and lost productive capacity which underlines the impact of TBI on the people injured, their families and society.

Although the injuries involved in mild TBI may appear to be minor they can nonetheless have a substantial impact on health services because they affect a large number of people and can result in long-term disability. The type of problems that can occur after mild TBI are numerous and wide ranging. They include headaches, fatigue and sleep disturbances, as well as problems with memory, attention and concentration and slowness in reactions and information processing (Goldberg, 2001). There can also be emotional and behavioural problems such as irritability, anger outbursts, mood swings, depression, anxiety and social difficulties. These difficulties can hinder return to work and disrupt family and social relationships and this highlights the importance of developing effective interventions for people with mild TBI (Fabiano & Daugherty, 1998).

People with mild TBI and their families can be better prepared to cope with any difficulties after the injury if they are aware of the possible consequences. Research has indicated that interventions which provide information, support and reassurance soon after injury can be effective at reducing the risk of long-term disability after mild TBI (Wade, King, Wenden, Crawford, & Caldwell, 1998). In New Zealand, the Accident Compensation Corporation (ACC) has recommended in its guidelines to clinicians that people with mild TBI be provided with information as part of interventions to enhance recovery and improve outcomes (Accident Compensation Corporation, 2001).

1.3 Patient Information Provision

Information provision is an important intervention to aid recovery from any medical event. The principal method for health consumers to receive information is from discussion with health professionals but recent health policies have encouraged health professionals to spend less time with their patients. This has lead to a growth in other means of information provision particularly pamphlets and information sheets (Rankin & Stallings, 2001). The value of information sheets lies in their ability to supplement and reinforce verbal education from health workers. They can correct

any misunderstandings and can be read as often as needed to help patients to retain information and learn more (Rankin & Stallings, 2001).

Patient information can also help to reduce anxiety and can lead to greater adherence to treatment and more appropriate use of health services (Wyatt, 2000). Many patients actively seek information as a coping strategy that helps to reduce the stress and anxiety surrounding their illness (Van der Molen, 1999). The desire for information is not just restricted to patients. The family members of people with TBI report that information is one of their highest needs following the injury (Sinnakaruppan & Williams, 2001).

However, there are deficiencies in many pamphlets and health consumers are often dissatisfied with the information they receive from health professionals (Meredith, Emberton, & Wood, 1995; Van der Molen, 1999). Many patients have limited reading skills and written information is often incomprehensible to them because of inadequate legibility and high reading levels (Arthur, 1995). Some people learn better from non-written material and it has been recommended that information be provided on videotape for people who do not respond well to written information including those with limited reading skills (Holland & Shigaki, 1998; Tooth, Clark, & McKenna, 2000).

1.4 Information Provision by Videotape

Video is used widely in health settings to convey information. An advantage of using video to provide information is its greater ability to attract and maintain the attention of people compared to printed material or audiotapes (Dowrick & Associates, 1991). The popularity and almost universal use of television and video indicates that people generally prefer viewing over reading even when they are literate.

Video can involve viewers personally by encouraging them to identify with the experiences and actions of those on screen. This facility can be used to make information relevant to patients by presenting realistic accounts from people with the same health condition and by modelling health care behaviours (Rankin & Stallings, 2001). Video can also present information in two modes, vision and sound, and this allows for dual coding which can be more effective than single coding in helping

people with TBI who have memory difficulties to learn and retain information (Wilson, 1992).

Research has shown that video is effective at increasing patient knowledge but, in general, it is not more effective than print media (Gagliano, 1988). The use of videotapes in patient education has been associated with increased patient satisfaction (Rankin & Stallings, 2001) and the advantage of video may lie in its greater acceptability and therefore greater use by many patients and their families. Research on the use of video in information provision has involved many different medical conditions but there appears to be a lack of research involving TBI. A search of electronic databases which included PsycInfo, Web of Science, Medline, ERIC, CINAHL, SportDiscus and Dissertation Abstracts produced no relevant research on information provision by videotape in relation to TBI.

1.5 The Current Study

The objective of the current study was to address the lack of information available on videotape for people with TBI and their families in New Zealand and the lack of research into the use of video for information provision in relation to TBI. To address the first issue, a videotape containing information on concussion (mild TBI) was produced as part of the study. The second issue was addressed by investigating the perceived utility of information provision by videotape among people with mild TBI and their families.

With such a high incidence of mild TBI, there are potentially clear benefits to the people injured, their families and society from research that seeks to improve the effectiveness of information provision for this group. The term families or family members will generally be used in this study to refer to those persons who are involved in supporting and caring for people with TBI. However, in situations where a particular relationship such as parent, sibling, partner or friend is relevant, the appropriate term will be used.

In seeking possible participants to receive the videotape, contact was made with staff at the Midcentral Health Concussion Clinic which was established in association with Massey University. During these discussions it was apparent that the first priority of the clinic staff in relation to information provision was to have a

specifically designed brochure containing information about concussion and the clinic's assessment processes to give out to clients and their families. At the same time, a survey of client satisfaction was being planned for the clinic and questions about information provision could be included in that survey. These circumstances provided the framework under which the design of the current study took shape.

A brochure and a videotape containing information about concussion were produced as part of the study and were given to people who attended the Midcentral Health Concussion Clinic. In developing these two resources, the study sought to make a useful contribution towards information provision for people with mild TBI and their families.

In the investigative part of the study the people who attended the Concussion Clinic were surveyed about various aspects of information provision. The aim of the survey was to compare the participants' perceptions about information provision depending on whether they received the videotape and brochure, the brochure only or neither of these two resources. The aspects of information provision investigated were (a) satisfaction with information provision, (b) amount of information received, (c) understanding of concussion, (d) preference for type of information media, and (e) number of times information was referred to.

The thesis is organised into seven chapters. This section, Chapter One, introduces the study and its aims and gives background information on TBI and information provision. A more comprehensive examination of the literature on TBI follows in Chapter Two and on information provision in Chapter Three. Chapter four outlines the development of the current study as it relates to the literature reviewed in previous two chapters and presents the study's hypotheses. The methodology used in the study is described in Chapter Five and the results of the research are reported in Chapter Six. The discussion of these results and their implications is presented in Chapter Seven.