Nurses' perception of knowledge, attitudes and reported practice towards patients with eating disorders: A concurrent mixed-methods study

Xin Yi Seaha,⁎,1, Xiang Cong Thamb, Netty Ryanie Kamaruzamana, Piyanee (Klainin) Yobasc

a Singapore General Hospital, Outram Road, 169608, Singapore
b Buangkok Green Medical Park, 10 Buangkok View, 539747, Singapore
c Alice Lee Centre for Nursing Studies, Yong Loo Lin School of Medicine, National University of Singapore, Clinical Research Centre (MD 11), 10 Medical Drive, 117597, Singapore

ARTICLE INFO

Keywords:
Nurses
Knowledge
Attitudes
Perception
Eating disorders

ABSTRACT

Eating disorders are complex disorders requiring specialised care, thus knowledge and attitudes are crucial for management. This study aims to examine nurses' knowledge, attitudes, reported practice, and perceptions towards patients with eating disorders in Singapore. A concurrent mixed-methods study was carried out in Southeast Asia's only psychiatric unit with eating disorders programme. Twenty nurses were recruited using census sampling. Quantitative data were analysed with descriptive and inferential statistics, while qualitative data were analysed with content and thematic analysis. Certain personal factors were associated with nurses' levels of perceived knowledge. Different attitudes towards managing these patients were identified during interview sessions.

Introduction

Background

Eating disorders are crippling conditions that will affect an individual's physical and mental health (Dray & Walde, 2012). Individuals with anorexia nervosa are underweight but still restrict their diet intake and have constant fear of weight gain (Rogge, 2014). Individuals with bulimia nervosa usually feel loss of control over food intake, and experience a sense of guilt after, which leads to compensatory behaviours such as using laxatives or purging (National Association of Anorexia Nervosa and Associated Disorders, 2014).

Globally, studies show that the lifetime prevalence rates of eating disorders are 0.9% for anorexia nervosa and 1.5% for bulimia nervosa (Hudson, Pope, & Kessler, 2007; Swanson, Crow, Grange, Swendsen, & Merikangas, 2011). In Singapore, eating disorders constitute one of the top ten leading specific causes of Disability-adjusted Life Years for females from ages 14 to 44 (Ministry of Health (MOH), 2004). Although the prevalence rate of eating disorders in Singapore is not very high, a considerable number of studies have reported alarming statistics of eating disorders in Singapore; for instance, the prevalence rate of females in Singapore at risk of developing an eating disorder is 7.4% (Ho, Tai, Lee, Cheng, & Liow, 2006). A tertiary general hospital in Singapore that provides specialised eating disorder treatment for patients reported a significant 30% increase in the number of patients over just a year (Lee & Hoodbhoy, 2013).

Disorders with high relapse rates usually inflict huge financial costs on a country's healthcare sector (The Butterfly Foundation, 2012). Patients with eating disorders face difficulties achieving efficient work performance due to their health conditions, which may result in frequent absenteeism (Hay, Darby, & Mond, 2007). In Australia, patients incur an estimated loss in earnings of $1.45 billion due to work absenteeism (The Butterfly Foundation, 2012). Eating disorders also have an adverse impact on patients' family members, as it has been reported that family members face increased stress and fragmentation of their families, due to the heavy burden of care resulting from the chronicity of eating disorders (Hilleage, Beale, & McMaster, 2006). They might also experience monetary constraints due to the high admission rates and the frequent and long-term treatments required by the patients (Hilleage et al., 2006).

Literature review

The studies identified in the literature review for this research highlighted the inadequate knowledge levels of healthcare professionals caring for patients with eating disorders. The majority of the
studies also discovered that these healthcare professionals displayed negative attitudes towards these patients. This could have been a result of society's stigmatising views of eating disorders, which could have influenced the healthcare professionals' own views (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000). Such pejorative attitudes and poor knowledge will negatively affect patients' treatment outcomes.

The majority of the papers in this review utilised convenience sampling. One of the disadvantages of using convenience sampling is self-selection bias, which might cause results that deviate from the norm (Farrokhi & Mahmoudi-Hamidabad, 2012). Another disadvantage is that convenience sampling does not use any sampling frame, and thus the sample obtained might not be representative of the population (Farrokhi & Mahmoudi-Hamidabad, 2012).

Questionnaires were used for all quantitative studies in this review. Questionnaires allow participants' identities to be kept anonymous, thus ensuring higher credibility of the responses to more sensitive questions, compared with interviews (Phellas, Bloch, & Seale, 2011). However, the completion rate for questionnaires is likely to be low (Phellas et al., 2011), and thus the data collected might be inaccurate. Another disadvantage is social desirability bias, which will affect the validity of the findings (Spector, 2004).

The majority of the studies did not use a validated instrument, and thus the findings may not be generalizable to the population (Kimberlin & Winterstein, 2008). It is important that studies use validated instruments to ensure the validity and reliability of the questions used to collect data (Brancato et al., 2004).

One knowledge gap is that these studies were all conducted in non-Asian contexts (e.g., the United States (U.S.) and Australia), which raises the possibility that their findings might not accurately reflect the situation in Asia, especially in a country like Singapore, where there are people of many different races and cultures who hold differing values.

Another knowledge gap is the lack of studies investigating nurses. Nurses are the ones spending most time with patients (Wilson, 2008), and with updated knowledge and skills, they will be able to deliver better bedside nursing care to them (Finkelman & Kenner, 2013). Therefore, it is important that research studies look into the knowledge levels and attitudes of these nurses, so that more can be done on the nursing side to improve patients' outcomes.

There was therefore a need to conduct this current study to close some of the knowledge gaps and improve on the methodological limitations previously described. Using a concurrent mixed-methods method to collect data, information can be gathered through both quantitative and qualitative approaches, and different research questions can be addressed via each approach (Bryman, 2006). The strengths of each approach can compensate for the limitations of the other approach, ensuring that the data collected give an in-depth explanation of the phenomenon of interest (Bryman, 2006).

Definition of terms

For this study, “knowledge” (K) is taken to include perceived and actual knowledge. Perceived knowledge is defined as nurses’ personal interpretations of their awareness of the prevalence of eating disorders, aetiologies, and services provided for eating disorders in Singapore, while actual knowledge constitutes nurses’ knowledge of diagnostic criteria and management of eating disorders. Attitude (A) is defined as participants’ views, feelings, and beliefs with regard to caring for patients with eating disorders. Reported practice (RP) is defined as the care provision that nurses reported they had provided. Perception is defined as nurses’ experiences, feelings, or understanding arising from the provision of care to patients with eating disorders. Finally, personal factors are defined as individuals’ demographics, such as age, highest educational qualification, years of experience etc.

Conceptual framework

The theory of planned behaviour (TPB) provided a conceptual framework and guided the formulation of research questions for this study. The TPB presents a systematic framework to identify the underlying reasons behind people’s actions (Ajzen, 1985). The TPB can also be used to predict human behaviours that the individuals have the ability to decide whether or not to exhibit (Ajzen, 1991).

The TPB consists of three variables: attitudes, subjective norms, and perceived behavioural control. It is postulated that these variables affect a person’s behavioural intention (see Fig. 1). The TPB emphasises that the level of behavioural intention a person possesses to perform an action will affect the eventual behaviour exhibited (Ajzen, 1991). In this study, one of the variables (subjective norms) will not be covered. Subjective norms are defined as the influences from others on one’s decision to behave in a certain manner (Ajzen, 1991), but this study focuses on nurses’ own perceptions of patients with eating disorders, excluding the influence of others. This variable has therefore been excluded from this study.

An individual’s attitudes can be influenced by behavioural beliefs, which are one’s beliefs regarding the outcome of the behaviour (Ajzen, 1991). An individual’s views, feelings, and beliefs regarding certain behaviours could have been developed by self-analysing whether a particular behaviour will bring favourable or unfavourable effects (Ajzen, 1991).

Perceived behavioural control is the way an individual analyses his ability to carry out an action (Ajzen, 1991). Perceived behavioural control is influenced by a set of control beliefs, which are an individual’s beliefs about certain determinants that may promote or hinder the performance of the behaviour. Control beliefs will affect one’s perceived behavioural control over the behaviour. Perceived behavioural control can also be affected by an individual’s attitudes towards performing a certain behaviour (Ajzen, 1991).

Behaviour can be defined as the eventual action taken (Ajzen, 1991). In this study, behaviour can be regarded as nurses’ provision of care for patients with eating disorders. Based on the TPB, behavioural intention highlights elements that can possibly motivate the performance of a behaviour, for instance an individual’s level of readiness and inclination to perform the behaviour (Ajzen, 1991). The previously mentioned variables (attitudes and perceived behavioural control) are the ones that affect an individual’s behavioural intention (Ajzen, 1991). In this study, the behavioural intention is also inferred in a similar way,