Abstract

**Background:** Type 1 Diabetes Mellitus (T1 DM) is a chronic metabolic disease with long term psychological and behavioral implications. Self-care behaviour is the cornerstone to adapt in the condition. Self-care patterns are established during the adolescence period. Socio-cultural oriented basic conditioning factors associated with self-care behaviour. None of the available studies have discussed this area among the adolescents with T1 DM. Purpose of the study was to identify self-care behaviour and the associated factors within the Sri Lankan socio-cultural context.

**Method:** Mix method study design was carried out. The cross sectional quantitative phase was carried out with 125 adolescents aged 10-19 years and their parents including all ethnic groups. The qualitative phase narrowed to the cultural dimensions of the ethnic group of Sinhalese. Self-Care Inventory (SCI) was utilized as scale of self-care adherence. Quantitative data were analysed using SPSS 22. Semi structured interview method was the main strategy to gather data in qualitative ethnographic phase. Thematic analysis method was used for the analysis of interview data. Ethical approval was granted from the University of Peradeniya, Sri Lanka.

**Results:** Among the participants, 53.6% were Female and 84.0% were Sinhalese. The median age of the participants was 13.0 years. The gender differences were highlight in exercise adherence score. The overall self-care adherence demonstrated significant relationships with age (r= -.307; p<.001), age at diagnosed (r=.187; p<.05) and duration of diabetes (r= -.376; p<.000). “Self-care responsibilities should not be given to the adolescents’ and “self-care autonomy is affected due to parental involvement” were the emerged themes relevance to sharing self-care. Family dynamics, religious beliefs and practices, cultural beliefs and practices, Social stigma, illness perceptions, educational context, culturally oriented dietary practices and exercise were highlighted socio-cultural oriented aspects within the core themes of the findings.

**Discussion:** Advancing age, developmental stage and duration of diabetes affects to lower levels of self-care adherence. The different level of cognitive, psychosocial and behavioural developments among the early, mid and late adolescence periods might be the reason. The self-care behaviour of the adolescents with T1 DM represent daily living pattern within the specific socio-cultural context.

**Conclusion:** The influence of socio-cultural oriented basic conditioning factors towards self-care behaviour brings to light in the current study.

**Nursing implication:** Self-care facilitated nursing care for the adolescents with T1 DM should be considered the impact of socio-cultural context.

**Key wards:** Type 1 Diabetes Mellitus, adolescents, Self-care behaviour, Sri Lankan socio-cultural