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Alcohol consumption patterns among parents of hospitalized children: findings from a brief intervention study

L. Bjerregaard[1,2] **RN, PhD, MSc (Soc), Diploma in Nursing Management, S. Rubak**[3] **PhD, A. Høst**[4] **DMSci & L. Wagner**[2] **DrPH**

1 PhD Student and **2** Professor, Research Unit of Clinical Nursing, Institute of Clinical Research, the Faculty of Health Sciences, University of Southern Denmark, Odense, **3** Senior Registrar and Associate Professor, Department of Pediatrics, Aarhus University Hospital, Skejby, **4** Associate Professor, Department of Pediatrics, H.C. Andersen Children's Hospital, Odense University Hospital, Odense, Denmark

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Aims: This study aimed to explore parents' perception and experience of a brief intervention (BI), focusing on their alcohol consumption habits to assess the impact on parents of staff members using motivational interviewing (MI) and to gain knowledge of how to reinforce initiatives regarding behavioural changes of lifestyle problems in a clinical setting.

Background: Substantial parental alcohol consumption influences children's development negatively. Nursing staff lacks knowledge and training in communicating with parents about alcohol issues. Little is known about parents' attitudes towards, and perception of, nursing staff addressing issues concerning their use of alcohol.

Methods: A qualitative approach by use of phenomenological and hermeneutic methods was applied. Through interviews with 15 parents, their opinions and perceptions of a brief alcohol intervention were explored.

Results: Three themes emerged from the phenomenological reduction: (1) experiencing respect and genuine interest from the nursing staff, (2) BI causing reflections on own use of alcohol, and (3) reflections continuing and developing over time.

Conclusion and practice implications: The parents did not mind having their lifestyle habits discussed in connection with having their child admitted to hospital. The method MI proved effective in getting the parents to talk about and reflect on alcohol consumption habits. The effects of the intervention seemed to last beyond the first months after the intervention took place.

Keywords: Attitude, Brief Intervention, Denmark, Health Promotion, Motivational Interviewing, Paediatric, Qualitative

Correspondence address: Ms Lene Bjerregaard, Institute of Clinical Research, Research Unit of Nursing Sciences, Campusvej 55, DK – 5230 Odense C, Denmark; Tel: +45-6541-2125; Fax: +45 6619 4292; E-mail: lbjerregaard@health.sdu.dk.

Background

The global burden related to alcohol consumption is considerable in most parts of the world. In the developed world, 9.2% of the disease burden is attributed to alcohol. In developing countries with low and high mortalities, respectively, the disease

burden is 6.2% and 1.6%, respectively. It is predicted that the alcohol-attributable burden will increase in these regions along with economic development (World Health Organization 2004). Alcohol ranks eighth among global risk factors for death, while it is the third leading global risk factor for disease and disability (World Health Organization 2011).

Alcohol is the third most significant risk factor for ill health and premature death in the European Union (EU), following smoking and hypertension (World Health Organization 2009). In the EU, it is estimated that one in six adults consumes alcohol at a hazardous or harmful level, defined as at least 40 g of alcohol per day for men and 30 g per day for women. One unit of alcohol contains 12 g of pure alcohol (World Health Organization 2009). This amount equals one bottle of regular beer, one shot of alcohol or a glass of wine. In Denmark, one in five citizens above 14 years of age exceeds the alcohol consumption levels (Hvidtfeldt et al. 2008). Excessive use of alcohol, according to these limits, increases the risk of establishing a hazardous or harmful drinking pattern with physical dependence of alcohol. Whether an individual has an alcohol problem or not depends on the effect of alcohol consumption on family life, work, the economy, one's self-perception, social functioning, others' reactions and one's state of health (Mundt et al. 2003).

Parental use of alcohol – impact on children

Children in families with parents who use alcohol excessively constitute a high-risk group. Parents' substantial alcohol consumption influences a child's development negatively and can affect the child emotionally, cognitively, socially and physically (Christoffersen & Soothill 2003; Flynn et al. 2006; Mundt et al. 2003). These children are admitted to hospitals more often because of accidents, incontinence, persistent headaches, stomach aches, nausea, muscle and skeletal pain, or infections (Christoffersen & Soothill 2003; Flynn et al. 2006;Wilson & Knight 2001). Several studies highlight that hospitalization of children is an opportunity to detect parents' excessive use of alcohol, to inform and educate the parents or to intervene, if necessary, and thus prevent the development of further alcohol abuse in the family (Sharma et al. 1999; Wilson et al. 2006, 2008).

Studies on alcohol consumption patterns in parents of hospitalized children identified 7–11.5% of the parents who screened positive for excessive or problematic use of alcohol (Bjerregaard et al. 2011; Flynn et al. 2006;Sharma et al. 1999; Wilson et al. 2006). These studies concluded that there is an undetected prevalence of parents with risky alcohol behaviour and that parents were willing to talk about their alcohol consumption habits.

Staff barriers for discussing lifestyle factors such as alcohol consumption habits are described among nursing staff members. Unwillingness to face the topic of alcohol may result in the problems being ignored or the parents being exposed to judgmental behaviour (Howard & Chung 2000; Mundt et al. 2003). Personal attitudes may originate from the staff member's own alcohol consumption habits, alcohol abuse problems in one's own network or genuine consideration for the child, lack of time and insecurity, or fear of reactions when discussing alcohol habits (Beich et al. 2003; Hadida et al. 2001). The greatest barrier, though, is the lack of professional skills and knowledge about alcohol abuse treatment. Moreover, staff may lack appropriate communicative skills concerning lifestyle matters (Burns 1994; Lock et al. 2002; Mundt et al. 2003).

Health promotion and brief intervention

Brief intervention (BI), aiming at mobilizing a person's own resources for change, builds on the principles of health promotion and has been empirically proven to work well on lifestyle issues, including alcohol habits (Babor et al. 2007; Britt et al. 2004; Kaner et al. 2007; Miller and Rollnick 2002).

BI studies using the method 'motivational interviewing' (MI) have reported better results than traditional counselling, especially regarding lifestyle changes (Bien et al. 1993; Bradley et al. 1998; Rubak et al. 2005). MI has proven effective in dialogues as short as 15 min, and studies show that the professional level of the counsellor has no impact on the result (Britt et al. 2004; Rubak et al. 2005). MI is found to be more cost effective than traditional advice, by Neighbors et al. (2010), resulting in a good public health value. Furthermore, there are no reports on negative side effects using MI (Britt et al. 2004; Rubak et al. 2005).

Aims

This study explored and interpreted parents' perceptions and experiences of participating in a brief alcohol intervention to assess the effect of the BI using MI and gain knowledge of how to reinforce initiatives regarding behavioural changes of lifestyle problems in a clinical setting.

Methods

Design

A phenomenological and hermeneutic perspective was used. Through qualitative interviews with 15 parents, knowledge of parents' understanding, experience and attitude towards the BI was obtained, including a reflection on the impact of the BI immediately after it took place and again 3 months later.

The BI

The study was performed in two paediatric units at a university hospital. During 1 year, all parents of hospitalized children were invited to participate in a BI, focusing on their alcohol habits and

including a screening for risky alcohol behaviour by the short questionnaire called Cut Down, Annoyance from others, feel Guilty, Early-morning Craving – Copenhagen (Zierau et al. 2005). Seven hundred seventy-nine parents participated in the BI. Eighty-six (11%) were screened positive for risky alcohol behaviour, 66 (77%) men and 20 (23%) women. The parents were generally positive towards the intervention; only 18 (1.4%) parents refused to participate because of the topic of alcohol. A more detailed analysis of the screening is described in Bjerregaard et al. (2011).

The nursing staff performed the brief alcohol intervention based on the principles of MI. Prior to the intervention, they had a 5-day training course about alcohol-related topics and training in MI according to Miller & Rollnick (2002). They were offered supervision throughout the intervention period.

The BI was systematic, as excessive use of alcohol is rarely visible and does not detect objectively. The intervention was opportunistic; the parents had not complained about, or asked for advice or help, concerning alcohol-related issues. The staff members took advantage of the opportunity to discuss lifestyle matters with the parents.

The intervention was aimed at getting the parent(s) to reflect on their alcohol consumption as a first step towards empowering the parent(s) to make a possible change of lifestyle. Questions about quantities of alcohol or measuring the level of eventual abuse were not an issue in the intervention.

The interviews

In a period of 4 weeks, all parents who agreed to the BI were subsequently invited to an interview. They were given written and oral information. When returning a signed form, they agreed to take part in an interview and to be reinterviewed 3 months later. No parent was excluded and the inclusion continued beyond data saturation to allow for dropouts (Kvale & Brinkman 2009).

Participants

Qualitative interviews with 15 parents were performed shortly after their children's discharge from the hospital and nine parents were reinterviewed 3 months later. The dropping out of six parents in the second interview was because of a lack of time (two parents), lack of energy because of having a sick child in the home (two parents), and because of own illness (one parent) or illness among relatives (one parent).

The interviews were performed in the parents' home. Semi-structured interviews were conducted, following a thematic interview guide allowing for new viewpoints to emerge, based on key issues prevalent in the research literature and from the theory behind MI. Apart from information of the sociodemographics, parents' own experiences with alcohol were discussed, as well as reflections and experiences related to the BI and the staff member performing it. The second interview used the same thematic guide, but focused on recollections and reflections regarding the BI.

For the content of the thematic guide, see Supporting Information Table S1.

The 24 individual interviews were audiotaped, and the duration of the interviews varied from 55 to 115 min.

Data analysis

Data were entered into the software program Nvivo8 (QSR International, Victoria, Australia) for structuring and coding. The analysis followed the descriptive phenomenological method by Giorgi (2009) and the meaning-condensing method described by Kvale & Brinkman (2009) in four steps.

To understand the informants' phenomenologically reduced statements, a hermeneutic interpretation of the results of the condensed themes was carried out according to Kvale & Brinkman's (2009) description of interpretation contexts.

Reliability and validity were attempted throughout the study, including interviewer reliability and validity of interpretations. Dialogic validation was obtained during the interview, as a common understanding was established by the interviewer, who, keeping own pre-understanding in mind, asked the informant directly if the content of the conversation was understood correctly (Malterud 2003). In the analysis, validation was performed in the relevant context of interpretation according to recommendations by Kvale & Brinkman (2009).

Ethical issues and approval

This study follows the recommendations in the Declaration of Helsinki (World Health Organization 1964) and was presented to the Ethical Committee of Science in the Region of Southern Denmark.

Informed consent was given by all study participants. All personally identifiable data were kept safe and confidential following general recommendations (Danish Ethical Council 1999). The study did not strain the parents or children unnecessarily as participation was optional. The methods applied are known and acknowledged in Danish clinical practice.

Findings

The informants were eight women and seven men, aged between 28 and 54 years (mean age, 36.6 years). According to the screening for risky alcohol behaviour by CAGE-C, six of the 15 parents screened positive for risky alcohol behaviour – three men and three women. In the re-interview, five of the nine parents screened positive – two women and three men.

Three themes emerged as the most important theme for further interpretation to explain the parents' perceptions and attitudes.

Experiencing respect and genuine interest from the nursing staff

In general, the parents received the request to participate positively. No one felt specifically pointed out as someone suspected as having an alcohol problem. The parents did not experience the nursing staff 'shaking their fingers', moralizing or cornering the parents during the BI. A common reaction among parents was 'this is a good idea' and 'an excellent occasion to talk about this issue'. The parents stated that being admitted to a hospital with your child makes you open, attentive and ready to learn.

Some parents obviously already had knowledge of how hazardous drinking affects a child, and felt updated and reassured by the intervention.

The parents considered the approach as an invitation they could decide whether to accept after being informed of the content.

A positive relation to the person conducting the intervention was considered important. The parents experienced a feeling of respect and genuine interest from the nursing staff evoking their views and attitudes. They said that the intervention turned out more like a conversation, in contrast to the experience of getting informed of something by the staff. Examples of statements appear in Supporting Information Table S2.

BI causing reflections on own use of alcohol

The parents were asked if they had gained new knowledge. They all knew the official health advice on drinking prior to the intervention and made a point of remarking that the increased reflections were useful and positive. The parents' immediate reflections were that the BI made them consider their own drinking habits and made them more aware of how it (alcohol use) had developed over time. They would probably reconsider their drinking habits in the time to come as a result of the BI. The parents screened positive expressed reflections on their former or actual excessive use of alcohol. The recollection of earlier stages in life was brought up, reconsidering and reinforcing the decision on their current use of alcohol.

Reflections continuing and developing over time

In general, at re-interview, the parents did not have a clear recollection of the BI that took place 3 months earlier, but they had all reflected on different aspects of the content. The reflections focused on their own use of alcohol, including use of alcohol in the immediate network (family, relatives and friends). The parents explained how they had become more aware of when, where and why they drink alcohol. They began noticing and reflecting on how much alcohol and in which situations they would drink alcohol and shared these reflections with their spouse, relatives or friends. The parents who were screened positive expressed how the intervention had made them more aware of their use of alcohol and that they had reflected on their use of alcohol more often lately. The BI had made them reconsider their own experience and history with alcohol and their decisions about reducing consumption or abstaining from use of alcohol.

Discussion

Main findings

According to the parents' perception and attitudes, the staff members were able to motivate the parents to participate in the BI, to make them feel safe and not 'cornered', and to convey a feeling of empathy and genuine interest in the parents.

MI is defined as 'a client-centered directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence' (Miller & Rollnick 2002, p. 47). When MI is used in an opportunistic BI, there need not be any problem or behavioural issue presented or decided upon before the BI takes place. In this study, the topic of alcohol consumption habits was explored during the BI. Subsequently, the motivation was directed towards exploring and resolving a possible ambivalence during the intervention.

The relation between the parent and the staff member performing the BI was considered important by the parents. They felt they knew him/her and had a positive impression of the staff member since their child's admission. A core strategy in performing brief MI is choosing the right moment to ask for permission and to get client agreement to talk about the topic, to understand the client's concerns and circumstances and thereby, promote a collaborative relationship with the parent (Emmons & Rollnick 2001; Miller & Rollnick 2002; Rollnick & Heather 1992).

When the parents meet an empathic staff member able to engage in a constructive conversation, it seems that the parents discover new opportunities and resources to overcome obstacles in their lives by implementing changes. This finding is consistent with the analysis by Faris et al. (2009) on MI from a client agency perspective. They define client agency as the individual capability of engaging in recovering or self-healing activities. A different aspect of self-efficacy is how the parents, in a more reflective way, consider the alcohol consumption of relatives and friends; the agency perspective is expressed in a parent explaining how the dialogue at the hospital was a 'jump starter' to discussing a relative's problem drinking.

In the interviews, the parents expressed the feeling of, on one hand, collaborating with the staff, and on the other hand, feeling conscious, autonomous and self-efficacious in choosing what-

ever change tactic suited their preferences. In the examples stated in Supporting Information Table S2, this reinforcement of the decisions already made by the parents about their use of alcohol was an outcome of the intervention that illustrates the concept of 'self-healing activities'. Personality factors and interpersonal tendencies can be explained by different abilities (or attitudes) among the nursing staff towards MI. These aspects can possibly explain why a brief single-session intervention has a strong-enough impact on the parents to last for 3 months.

The positive attitude of the parents and their willingness to share their former and present relation to alcohol can be explained as a result of the parents' experience of being met with a spirit of collaboration and with empathy, respect and understanding from the nurse performing the BI. These concepts are all core elements of the MI spirit (Miller & Rollnick 2002; Miller & Rose 2009).

Strengths and limitations

It is important to bear in mind that the parents interviewed in this study came forward voluntarily. It is plausible to think that only those parents that had had a positive experience of the BI would be likely to come forward for the interview. On the contrary, Supporting Information Table S3 shows an overall positive attitude towards the intervention. Of the 779 parents that participated in the BI, 441 (54%) made a comment. Of these 441 comments, 37 (4.7%) stated negative comments like 'waste of time' (22) or neutral comments like 'not relevant to me, I don't drink alcohol' (15). A total of 384 (49.3%) parents commented positively on the intervention; 126 of them made positive remarks because of alcohol abuse issues in their own families or networks. What is interesting, though, is that the parents who were screened positive (had alcohol issues) wanted to participate in the interviews. This stresses their need for, or wish to continue, the conversation or explain themselves more fully. The extent of addiction in those screened as having a risk of an alcohol problem was not an issue in the interviews. Establishing a fair share of parents screened positive and negative, respectively, served to validate the findings, as experiences and attitudes represented both groups of parents.

This study did not define the extent of the risk of having an alcohol problem, except the definition of being 'at risk' or 'not at risk'. The purpose of the study was not to conduct therapy on the parents. The objective was to explore the feasibility of discussing the matter with the parent(s), and, by introducing an empowering perspective, to make them reflect and, thus, decide whether to change their habits.

Detailed findings

The parents participating in this study expressed a feeling of genuine interest from the staff members, of meeting empathy, of collaboration, and of being respected as an autonomous and self-efficient person. These concepts are all consistent with the core components of the MI spirit, indicating that essential concepts of MI were used in the BI. MI is described as a simple method and easy to administer. Despite this fact, applying MI to a clinical setting represents a dramatic shift in the way staff usually communicates with patients; typically they have the role of being providers of information, expert advice and guidance. Achieving the whole range of MI skills takes time and extensive training, even though the basic MI skills and strategies can be learned in a short training course (Resnicow et al. 2002). An important component of the efficacy of MI is integrating the spirit of MI along with the more technical skills of MI (Miller & Rose 2009). To be collaborative rather than authoritarian, evoking the parent's own motivation instead of installing it, as well as honouring the client's autonomy, are crucial. Miller & Rose (2009) emphasize that individual feedback and supervision is important to continuously improve communication skills. In this study, the nursing staff members had access to feedback and supervision throughout the intervention period. Even though steps were taken to decrease barriers, these issues, combined with the shift from the staff's traditional training in providing expert information and counselling towards the more client-centred approach, might influence the number and quality of the BIs performed.

Implications for clinical practice and future research

The participating parents in this study welcomed the BI regarding their lifestyle and did not mind discussing this, indicating that barriers towards lifestyle topics can be overcome. Even though the results from this study cannot be generalized, the general structure can be transferred to comparable contexts in different clinical settings. MI is a simple and inexpensive communication method that can be applied to any context and practice by any nursing staff member. In this study, MI was used in a single and very short encounter and in an opportunistic manner focusing on alcohol consumption. Given the positive outcome, a similar intervention could be implemented as a standardized routine intervention in any setting and with any patient or citizen. It could expand to include more sessions. The method fits well into any health practitioner's encounter that implies a health-promotive perspective that aims at enabling the patient or citizen to act. It is essential and crucial, though, to focus on and upgrade staff members' communication skills and to offer supervision when implementing health-promoting initiatives in any healthcare setting.

The qualitative approach has created insight into an unknown area, thus offering a more substantial platform regarding insight into, and knowledge of, parents' opinions that can be of use as a

basis in future studies. Further research is needed to standardize procedures for brief alcohol interventions, as well as clinical controlled studies to analyse the effect of a standardized procedure for BIs.

Conclusion and practice implications

The overall lessons learned from this study were that

• parents did not mind discussing their lifestyle habits in connection with having their child admitted to hospital; some parents even expected it and suggested further and similar initiatives;

• MI proved efficient in getting parents of children in the hospital to talk about and reflect on their alcohol consumption habits; and

• the effect of MI on the parents' perceptions and attitudes seems to last beyond the first months after the single intervention took place.

Concepts consistent with the spirit of MI were detected in the parents as they spoke about their experiences and perceptions. They felt autonomous and respected and in a collaborative partnership with the nursing staff. The parents felt genuine interest in them as parents and in their children's well-being. This resulted in a more self-efficient and confident commitment to talking about one's own alcohol habits and possible behavioural changes.

It is important to reinforce initiatives regarding behavioural changes on lifestyle problems in a clinical setting. It is essential to stress the significance of the context in which the BI is introduced and the importance of training, as well as offering qualified supervision.

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Author contributions

LB, SR, AH and LW were responsible for the study design. LB was responsible for data collection, data analysis drafting and revision of the manuscript. SR, AH. and LW supervised the study and contributed to critical revision of the manuscript.

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Supporting information

Additional Supporting Information may be found in the online version of this article:

Table S1 Thematic guide to interview with parents

Table S2 Examples of statements

Table S3 Seven hundred seventy-nine parents' comments on brief alcohol intervention

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