[This is a draft for a draft for a paper and by no means complete in terms of introduction, literature, results, discussion, etc.]

**Effects of pathological gambling and alcohol dependence on strain and coping mechanisms of family members: Findings from the Burden, Expectancies, Perspectives of Addicted individuals’ Significant others study (BEPAS)**

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**Introduction**

Addiction affects not only the addicted individual itself but the social network surrounding him or her. A recent nationwide population-based survey in Germany estimated that 9.5% of the adult population are family members of addicted individuals (FMAs; Berndt, Bischof, Besser, Rumpf, & Bischof, 2017). A variety of previous studies presented evidence for increased strain and disempowerment of family members affected by addiction (Klein, 2000; Orford et al., 2005; Shaw, Forbush, Schlinder, Rosenman, & Black, 2007).

[Research on strains]

In a current study carried out in three cities in Germany, patients in the primary health care setting are proactively and consecutively screened. On base of the pretest data of the study (n=2,773), the prevalence of being an FMA with a current addiction in the past 12 months in primary care was estimated at 12.7% (95%-CI 11.4-14.0), another 6.5% (95%-CI 5.6-7.4) had a family member with an addiction in remission (Bischof et al., 2018). The most common addiction in this study was alcohol dependence (79.5% current, 84.8% in remission), pathological gambling was less prevalent (7.4% current, 9% in remission). Particularly depressive mood and adverse health behavior were strains reported by the participants (Bischof et al., 2018).

Previous studies on FMAs of individuals with alcohol dependence showed that stress and strains as a consequence of an alcohol dependence of a loved one were often worries for the health of the addict, financial problems, feelings of helplessness and depression (Orford et al., 1998).

While FMAs were often and for a long time stigmatized or pathologized for caring for their addicted relative which is depictured in e.g. the “family pathology models” or in the concept of “co-dependency” (Klein & Bischof, 2013; Orford et al., 2005), there are newer, non-pathologizing concepts that are more oriented on experiences and resources of the FMAs: Orford and colleagues developed the *Stress-Strain-Coping-Support Model* (Orford, Copello, Velleman, & Templeton, 2010; Orford et al., 2005) on base of numerous research projects with qualitative interviews with more than 800 family members of addicts in Great Britain, Mexico, Australia, and Italy that illuminate cross-cultural commonalities in the experiences of stress and strains, and in the coping with the burden of addiction in the family. Although the Stress-Strain-Coping-Support Model covers most of the topics that FMAs are confronted with, it does not include barriers to treatment. [Research on increased medical costs for FMAs] Another limitation is the predominant recruitment via media and self-help groups. Previous research has shown that media recruitment leads to biased data caused by a more burdened study population (Rumpf, Bischof, Hapke, Meyer, & John, 2000). Additionally, the focus of previous studies was on female partners or children of addicts and on FMAs of alcohol or drug addicts (Orford et al., 2005). Moreover, to date, there are only few studies on family members of addicts in Germany. Hence, the transferability of the Stress-Strain-Coping-Support Model is yet to be tested.

Aim of the present study was to analyze if there are specific differences between alcohol dependence and pathological gambling concerning the stress and strains, the coping strategies, the barriers for treatment seeking, and the needs of FMAs. Therefore, support needs and barriers to treatment were added to the Stress-Strain-Coping-Support Model. These findings could help to develop a more integrative model for a conceptual understanding of strains and resources of FMAs and to give new impetus for the improvement of health care situation for FMAs.

**Methods**

**Participants**

The project “Burden, Expectancies, Perspectives of Addicted individuals’ Significant others (BEPAS)” was a model project with a mixed-method-approach over 24 months. Participants were recruited via 1) self-help groups and counseling services, and 2) proactively in general practices and a general hospital. This two-fold recruitment approach followed theoretical assumptions: With recruitment strategy 1, individuals with experiences in the treatment system were included. Since most of previous international studies were conducted in the context of self-help groups, the BEPAS study aimed to examine the transferability of previous results to Germany. With recruitment strategy 2, participants were included who probably hadn’t been in touch with treatment facilities for FMAs. This was important to assess barriers to treatment. The recruitment followed the approach of “theoretical sampling” based on the Grounded Theory (Glaser & Strauss, 2008) which means that recruitment followed the approach of theoretical saturation in terms of specific addiction forms or relationship constellations.

For recruitment strategy 1, participants were recruited via cooperating self-help groups and counseling services. For recruitment strategy 2, participants aged 18 to 64 in three general practices and one general hospital were screened consecutively with an i-Pad in the context of another research study. In every setting, the screening was conducted over eight weeks. If the screening was positive (i.e. the participant had a family member with an addiction problem), informations about the BEPAS study were handed out and informed consent for study participation was requested. The study procedures were carried out in accordance with the Declaration of Helsinki. The study was approved by the ethics committee of the University of Luebeck, Germany.

Overall, the BEPAS sample included 98 participants, 64 recruited in self-help groups and counseling services, and 34 recruited in general practices and the general hospital. In terms of sex, 77 participants were female.

For the current analysis, 15 FMAs of pathological gamblers were matched with 15 FMAs of alcohol dependents (28 female, 2 male). Average age was 53 years (range: 28-78). In terms of relationship constellations, 20 of the FMAs were wives/female partners, two were husbands, two daughters, and six mothers of individuals with an addiction problem. Most of the participants for the current analysis were recruited in self-help groups (n=27).

**Procedure**

After giving informed consent, participants were contacted by telephone by a member of the study staff to answer some more questions. The telephone screening included nine questions: the relationship to the addicted person, the addiction form, if the addiction problems were present within the past 12 months, and if there was contact to the addicted person on a regular basis. Additionally, treatment experiences of the FMAs were asked. An appointment for a personal interview was set, if possible, at the University, if not, at home of the participants or at the collaborating self-help groups and counseling services.

The qualitative interviews were conducted on base of a manual and lasted between 60 and 120 minutes. Every interview was recorded. Additionally, a protocol by the interviewer was written within 24 hours. After the qualitative interview, participants were asked to fill out a standardized questionnaire.

**Qualitative interviews**

The qualitative interviews were based on a manual following the “Stress-Strain-Coping-Support Model” by Orford and colleagues which covered five topics displayed in the following table.

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| --- | --- |
| **Topic** | **Specification** |
| Addiction problem | * addiction form, quantity, frequency, pattern of consumption * development, abstinence, relapses of the index patient (IP) * treatment utilization of the IP |
| Strains | * familial, social * financial * psychological, physical * guilt, shame |
| Coping | * Attitudes and behavioral patterns * Appropriate and unsuitable coping strategies * changes in strategies over time |
| Resources | * family, partners, friends * work, colleagues * neighbors/community, leisure time, nature, religion |
| Desires and needs | * treatment utilization of the FMA, access paths * barriers to treatment, experiences of stigmatization * desires and needs |

**Analysis**

The analysis was based on the Grounded Theory (Glaser & Strauss, 2008) and followed an iterative process between assessment and analysis: At regular and frequent intervals, team meetings took place to develop a system of categories. Interviews were not transcribed but rated based on the audio files and the protocols of the interviewers by different coders and discussed in case-conferences. In case of interrater-differences, the categories in question were discussed in the team. The final coding of the interviews is therefore based on at least two ratings, in some cases on three to six ratings.

In the end, the categorical system included 179 items. These were divided in six main categories with 24 sub-categories. The six main categories were: Addiction problem, Strains, Coping, Resources, Barriers, and Desires and needs.

**Results of the qualitative interviews**

**Strains**

The FMAs of alcohol dependents and pathological gamblers reported of increased stress and strains due to the addiction problems of their IP. Cause of these strains was often the deviant behavior of the IP. Almost all FMAs reported arguments and communication problems especially when communicating about the addiction problems and/or relapses of the IP. Sometimes, these arguments were accompanied by physical quarrels, culminating in some cases in physical violence. All FMAs were stressed by the unreliability of their IP. Especially in FMAs of alcohol dependents, verbal violence and aggression played a significant role: “He insulted me in the worst way, humiliated me, torned away my blanket. (…) I was scared. I really was scared. Like I said, he behaved like a monster.” (Wife of an alcohol dependent) Furthermore, FMAs of alcohol dependents more often reported to be threatened by their IP (that the IP will leave the FMA, that the IP will commit suicide, that the IP will harm the children), and that - in general - the unpredictability of the IP caused increased strain. FMAs of pathological gamblers on the other hand, reported more often of stress caused by financial aspects that come along with the addiction, as for example being financially responsible for the IP or being financially dependent on the IP. Debts of the gambler, illegal actions, and consequential existential worries increased the burden of the FMAs significantly.

Additionally, all FMAs were exposed to familial and social strains caused by withdrawal from the social life, arguments within the family or with friends, experiences of violence, and conflicts of loyalties. FMAs of alcohol dependents more often reported problems in social life because they felt ashamed when their IP was drinking on social occasions and therefore withdrew from friends and social life. Additional reasons for withdrawing were fear of stigmatization and the hope to get some control of their IP’s drinking with this strategy. For FMAs of pathological gamblers, strains in the work life were more pronounced. Some of the participants reported that they had to work more to earn more money because of the debts the IP generated with his or her addiction. Some others had to experience incapacity for work because of the psychological stress caused by the addiction problems of the IP.

All participants reported affective and cognitive strains. These were mainly fear of loss or separation, anger, fear, helplessness, frustration and disappointment, loss of respect for the IP, and dealing with guilt. In FMAs of alcohol dependents, especially shame and the fear of being stigmatized were present which resulted in concealment and lies which again increased the strain because of the accompanying social restrictions. Beside constant sadness, worries about the health of the IP and an alienation from the IP because of the changes in the personality of the IP manifesting itself in loss of trust, occupied FMAs of alcohol dependents more pronounced than FMAs of pathological gamblers. Those more often reported existential fears due to financial strains and debts: “Of course the pressure: Is everything falling apart? What I have built in 40 years? (…) My financial security, especially for the older age? It wasn’t guaranteed until our contract (*separation of properties*).” (Husband of a pathological gambler)

Without differences due to the addiction form, all FMAs reported psycho-somatic strains like extreme exhaustion, permanent tenseness, headaches, depression, sleeping problems, and physical indispositions.

**Coping strategies**

The participants showed a multitude of coping strategies, more ore less conscious and not always successful, and a variety of attitudes and behavioral patterns when confronted with the addicted person. In the following, the most frequent coping strategies are described.

The strategy “influence/control” included all strategies to take some influence on the addiction and was executed by all participants. Most often, the FMAs tried to confront the IP in conversations, took over responsibility, got in touch with counseling services, controlled consumption and movement of the IP, tried to interdict consumption/gambling, issued an ultimatum, punished the IP for gambling/consumption. Especially in FMAs of pathological gamblers, participants tried to gain financial control with taking over bank accounts, and assigning pocket money to the IP.

The coping strategy “setting boundaries” included distraction from the problems, awareness of the FMAs own needs, emotional or physical distance, independence or building a new existence, cutting of contact or separation.

“Tolerance/enduring” on the other side was a strategy comprising resignation, softness or inconsequence, self-sacrifice or simply waiting for the problems to end by themselves. Some of the participants also “created a taboo” which means they refused to believe that the problems were serious or they kept the problems secret and did not talk about the addiction.

Another strategy was the use of “Meta-strategies” to cope with the addiction problems like obtaining informations via counseling services or the Internet or like acceptance. Most FMAs did not use only one coping strategy but a tried a variety of strategies over time to cope with the stress of having a loved one with an addiction problem.

Overall, the results of the comparison of FMAs of pathological gamblers with FMAs of alcohol dependents show that FMs of pathological gamblers used more often strategies of influencing and controlling and FMs of alcohol dependents more often reported the strategies “setting boundaries”, “tolerance/enduring”, “creating a taboo”, and “meta-strategies”. Additionally, the results of BEPAS show that more passive coping strategies like enduring the problems, sacrificing, and suppressing the problems were associated with increased stress and strains, whereas more active coping strategies like setting boundaries and meta-strategies could decrease strains, especially emotional and physical distance, and awareness of one’s own needs.

**Resources**

In terms of resources, no differences could be found between the forms of addictions. Family and friends were a helpful resource if they were able to listen openly and provided support and personal conversations. FMAs perceived it as not helpful if family members of friends gave well-meant, generous proposals for how they should act. According to professional resources, the most frequently mentioned was the self-help group (which of cause could be associated with the recruitment of the study). Self-help groups gave the opportunity to meet other affected persons and exchange experiences. Other professional resources were psychological therapy, counseling services, and the police (most often in FMAs with the experience of violence in association with alcohol consumption of the IP).

**Barrriers to treatment**

Again, no differences between FMAs of pathological gamblers and alcohol dependents could be found. The most frequently mentioned barrier was shame and the fear of stigmatization. Other barriers were the fear of getting pulled down by reports of others (e.g. in self-help groups), the fear of being blamed for the addiction problems (especially as a parent of an addicted child), and the fear of being open to others.

Overall, only few barriers were mentioned, and only 13 of the 30 FMAs reported barriers to treatment which could again be associated with the recruitment strategy in self-help groups.

**Desires and needs**

“Desires and needs” are an extension of the Orford-Model and summarize the ideas of the FMAs how the treatment system can be improved to correspond to their specific needs. Most FMAs critized the insufficient access to the treatment and the lack of presence of the treatment system. All participants complained that the treatment system did not provide enough help for family members. Especially FMAs of pathological gamblers wished more visibility and accessibility of the addiction treatment, both for themselves and for the addicted person. Another problem was the reach of treatment services: The knowledge where to find contact persons or addresses was scarce, often and especially in rural areas, services are rare and therefore travel routes long. Meetings of FMAs of pathological gamblers are rather infrequent, and together with long travels, treatment utilization or self-help groups don’t always fit in everyday’s routine of a family. In Germany, getting a psychotherapy is linked to long waiting lists. Immediate help therefore is not always available, although needed. Some FMAs wished to have a stay in a sanatorium to recover from the stress the addiction of their loved one brought.

One critique was the lack of an efficient networking between the different treatment agents. FMAs often felt like “being in a jungle” with no help to find the way out. They wished more public awareness, especially in the help system: FMAs complained about a lack of interest and attention in doctors and that they did not get any counseling and no referrals to addiction-related institutions. Another flaw that was recognized was related to training in educational institutions like schools (mentioned by parents of addicted children) or kindergarten (mentioned by children of addicted parents).

All FMAs had a desire towards the staff of treatment services to receive specific behavior guidelines. Often they felt overload with stress and did not know how to act “the right way” and wished to have a coach on their side.

**Discussion**

FMAs reported significant overall stress and strain regardless of the type of addiction they were exposed to. However, impairment and coping strategies utilized by FMAs differed depending on the type of the addiction. FMAs of pathological gamblers more often reported existential fear which can be explained by the high financial expenses of gambling (Kraus, Sassen, Kroher, Taqi, & Bühringer, 2011). FMAs of alcohol dependents on the other side more often reported fears for the health of their IP. Shame and stigmatization were more often mentioned by FMAs with an IP with alcohol problems, although previous studies found both also in FMAs of pathological gamblers (Dickson-Swift, James, & Kippens, 2005; Hing, Tiyce, Holdsworth, & Nuske, 2013). It can be assumed that caused by more experiences of violence and shame due to deviant behavior of the IP in social situations, FMAs of alcohol dependents are more likely to report shame and stigmatization.

Both groups expressed the need for a stronger presence of the treatment system and an increased public awareness concerning addictive disorders in society in order to improve care for FMAs. In general, Germany has a lack on evaluated treatment services for FMAs (Buchner, Koytek, Arnold, Wodarz, & Wolstein, 2013). The desires and needs expressed by the participants of BEPAS emphasize the need to improve the treatment system for FMAs and to increase awareness and sensitization of treatment agents. Especially in networking is a need for improvement, both in the treatment of FMAs and in the treatment of IPs which would relieve FMAs who feel responsible for their IP.

Overall, the “Stress-Strain-Coping-Support-Model is transferable to Germany and should be extended with the components “Barriers to treatment” and “Desires and needs of FMAs”.

**Limitations**

Unfortunately, the sample included only three participants recruited in general practices and in general hospital, so no comparisons between the recruitment strategies is possible. Another bias could be caused by the unequal gender ratio. The BEPAS study didn’t verify if the IPs truly had a dependence, all results were based on the subjective perception of the FMAs. However, since the aim of the study was to assess a comprehensive view on the living conditions of FMAs, the perception of the participants was of central meaning.

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