General Discussion

Limitations
This thesis has several limitations, which need to be considered. In the first place, this thesis is by no means exhaustive. Especially the first chapter of the thesis on the prevalence of bereavement-related psychiatric disorders, presents only part of the picture. In order to ascertain that the studied widows and widowers were suffering from a mental disorder accompanying bereavement, we solely included studies in which diagnoses were made according to diagnostic criteria and assessed with a psychiatric or standardized diagnostic interview. We excluded all studies attempting to estimate the presence of a Mental Disorder by means of a cut off point in various questionnaires. Neither did we include studies on complicated grief, since this is not yet incorporated in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994). Therefore, part of the problems the widowed encounter remain underexposed.

Second, the setting of a randomized clinical trial in which the visiting service for older widowed individuals was studied has implications for the reached population of widows and widowers and therefore presumably for the results of the intervention as well. During the study, recruitment of participants was aimed at trial participation instead of participation in the intervention. This might have attracted a slightly different population. Some of the home visits were ended prematurely, since the participant did not really need help. These participants would not have applied without the research context. Conversely, some of the most fragile widowed individuals that actually could have benefited most from the intervention could have been scared off by the trial setting in general and the randomization in particular. This suggestion is confirmed by coordinators of the studied visiting services, who claim that the participants that currently make use of the visiting service (outside the research context) have more emotional problems than the study participants. The possible implications of differences in the population, can be derived from our own results as well as from reviews on the effects of bereavement interventions (Schut & Stroebe, 2005; Schut et al., 2001), both indicating that the intervention is more effective in more at risk individuals.

Finally, the knowledge on effective bereavement interventions is rapidly growing. Some of the information known today, was not available at the time the study was designed. Based on the present knowledge, we might have made different decisions and perhaps we would have selected a different sample. However, since we can not go back on earlier decisions, several findings are based on post-hoc subgroup analyses.

Discussion
In this thesis we examined whether the widowed actually need help to adapt to their loss and whether bereavement interventions really help the widowed, a subject that has been debated by several researchers (Jordan & Neimeyer, 2003; Schut & Stroebe, 2005; Schut, Stroebe, Van den Bout, & Terheggen, 2001). Therefore, not all findings in this thesis are new. Still, we believe this thesis contributes to the growing knowledge on the need and helpfulness of bereavement interventions. We started this thesis with a rather broad scope, focusing on the widowed in general. This scope was gradually scaled down to the cost-effectiveness of one particular bereavement intervention for several subgroups of high risk individuals. This was necessary since it is not possible to examine the entire field of bereavement interventions in a single study. However, in this general discussion we will try to look at our results on the visiting service for older widowed individuals while taking a broader perspective.
The first question, whether the widowed actually need help, was addressed in the first chapter of this thesis. Based on the systematic review we conducted, we believe that a portion of the widowed population indeed need help to adapt to their loss. Even though we restricted our search by excluding all studies that did not examine the prevalence of bereavement-related psychiatric disorders according to diagnostic criteria as assessed with a structured diagnostic interview, we demonstrated elevated risks in Major Depressive Disorder, Post Traumatic Stress Disorder, Panic Disorder and Generalized Anxiety Disorder. Presumably, the amount of widowed persons with serious complications would have been even larger if we included studies attempting to estimate the presence of a disorder by means of a cut off point in various instruments (e.g. Beck Depression Inventory or Center for Epidemiological Studies Depression scale), which generally identify more possible cases than diagnostic interviews. We also excluded all studies regarding complicated grief, since it is not yet incorporated in the Diagnostic and Statistical Manual (DSM). Complicated grief is believed to be even more common than other bereavement-related disorders (Horowitz et al., 1997), therefore inclusion of studies regarding complicated grief would have yielded larger estimates as well. Summarizing, it may be stated that a substantial part of the widowed does need help and that our estimate of the amount of widowed persons in need of help is conservative.

Although a substantial part of the widowed need help to cope with their loss, helping all the widowed is not very beneficial. Since most of the widowed are able to adjust relatively well over time and do not need a specific intervention to regain pre-bereavement levels of functioning, helping all the widowed will not produce large benefits in the public mental health. Moreover, since offering help usually involves considerable expenses, helping all the widowed is also not very sensible from the health economic point of view.

So who should we help? The most ethical answer to this question would most definitely be to help those widowed individuals who need it most. This rationale has led to a tremendous amount of research that has been conducted to predict bereavement outcome. In the second chapter of this thesis, we expanded on this research by studying a comprehensive set predictors of bereavement outcome in a large sample of widowed individuals. We based the inclusion of predictors mainly on the results of other relevant studies. However, we were not able to include all suggested predictors due to the cross-sectional design. Initial high distress is also considered to be a predictor of poor bereavement outcome, however this could of course not be tested with one single measurement. We demonstrated that seven predictors: younger age, female gender, low education, a shorter duration of widowhood, loneliness / perceived non-supportiveness, physical health and low mastery, in different combinations, explained a substantial part of the variance in all our selected outcome measures (depression, anxiety, somatization, complicated grief and health related quality of life). The predictor duration of widowhood is not really considered a risk factor as this variable is not a subgroup characteristic, instead time goes by for each widowed person. The remaining six risk factors are actually not specific to poor bereavement outcome. All identified risk factors are considered to predict depression in general as well (Schoevers et al., 2006; Smit, Ederveen, Cuijpers, Deeg, & Beekman, 2006). Besides the identification of risk factors, we also tested whether two resources -mastery and social support - could function as a buffer by decreasing the impact of the identified risk factors. This notion was supported by our findings. Mastery reduced the influence of physical illness and perceived supportiveness reduced the influence of both duration of widowhood and younger age. In addition, both resources maintained a direct association with the outcome measures. Based upon these results, we
suggested that enhancement of mastery and offering social support should probably be components of effective support for widowed individuals most vulnerable to psychiatric complications.

Although helping those widowed individuals at risk for poor bereavement outcome appears logical, it still is not always beneficial. Not all interventions that are assumed to be helpful will actually help. In addition, what is helpful for one subgroup of widowed individuals will not necessarily help others. The notion, that offering help to all individuals that are part of a risk group is still not always beneficial, is supported by our main findings on the effects of the visiting service. We did attempt to include widows and widowers that were part of a risk group by selecting only widowed persons with at least moderate feelings of loneliness. This selection criterion was not enough to demonstrate significant effects, even though loneliness is believed to predict poor outcome, bereavement-related and in general. Two different hypotheses could explain these outcomes: either the visiting service did not help or the widowed that were offered the visiting service did not need it.

Since both the experimental and the control group did improve over time, the latter explanation appeared the more logical one. Moreover, significant differences were found in social lonely, low educated and physically ill widows and widowers. In addition, the visiting service even appeared cost-effective in social lonely and low educated widowed persons, and widows and widowers with complicated grief. Therefore, it is reasonable to believe that the presence of moderate feelings of loneliness is not distinguishing enough to discriminate between the widowed that need help from the rest of the population. It is generally known, that people give evidence of great resilience (Bonanno, 2004) and that being exposed to a single risk factor does not necessarily mean adverse outcome. However, some risk factors display stronger relationships with negative outcomes than others and the exposure to multiple risk factors increases risks seriously. Selecting those individuals that are in need of help more carefully has two great advantages. In the first place, one can expect larger effects since the target group has a higher risk of developing serious problems. Second, the actually number of persons that need to be helped is smaller, which is very interesting from the health economic point of view (Schoevers et al., 2006). In our study, social loneliness, low education and poor physical health were better predictors of poor bereavement outcome and effect than at least moderate feelings of loneliness (please note that those risk factors actually constituted a combination of the mentioned risk factors: social loneliness / low education or poor physical health with at least moderate feelings of loneliness and the loss of the spouse in the past 14 months). In other studies, initial high distress and complicated grief were found to be the best predictors (Jacobs & Prigerson, 2000; Schut & Stroebe, 2005; Schut et al., 2001; Zisook & Shuchter, 2001).

In order to optimize helping the widowed, one does not only have to direct interventions towards the right population. As already mentioned, one has to offer the right help as well. There are numerous different interventions, based on different methodologies and techniques. So what do we offer to whom? In the second chapter of the thesis, we suggested that enhancement of mastery and provision of social support could help at risk individuals adapt to their loss. Our study on the visiting service did offer some support for the helpfulness of social support since the visiting service, which was based on the provision of social support by a trained volunteer, was actually helpful (and even appeared cost-effective) for social lonely widowed individuals. However, the experimental group did not differ from the control group in the actual reduction in social loneliness, not in the entire sample nor in the social lonely sub-
group, which did not correspond to our suggestion. Whether enhancement of mastery is helpful can not be concluded from the results of our study on the visiting service, since the visiting service had no effect on mastery, nor did it help widowed persons with low mastery.

It is not quite clear which parts of the visiting service are effective and by what means the reduction in depressive symptoms and the improvement in health related quality of life is achieved. Which is not surprising as our study was not designed to identify the underlying mechanisms responsible for good outcomes. However, we have some ideas why the visiting service appears to be effective in precisely social lonely, low educated and physically ill widowed individuals. First of all, the intervention provides social lonely widowed individuals with some of the support they lack in their direct environment. Furthermore, the visiting service is not an intellectually challenging intervention and could therefore be more suitable for lower educated individuals. In addition, the intervention consists of home visits, which makes it accessible for physically ill individuals or individuals with functional disabilities. The first two features apply to bereavement groups as well, indicating that bereavement groups might be helpful for social lonely and low educated widowed persons although this should be confirmed in further research. The last feature, the home visits, is typical for the visiting service. Therefore, we suspect the visiting service to be more suitable for widowed individuals with poor health than bereavement groups.

Although the visiting service appeared cost-effective for a subgroup of widowed individuals with complicated grief at baseline, we still would not recommend the visiting service as the intervention of our choice. Complicated grief is a serious disorder with long-lasting implications on well-being and health. Several effective treatments with well-trained professionals have been developed in order to ameliorate complicated grief, which are tested in solid randomized clinical trials (Shear, Frank, Houck, & Reynolds III, 2005; Boelen, de Keijser, van den Hout & van den Bout, 2007; Wagner & Maercker, 2007). The visiting service is an easily accessible social assistance by trained volunteers, which was intended for lonely widows and widowers. The cost-effectiveness of the visiting service for widowed persons with complicated grief was tested in post hoc analyses instead of in a trial entirely directed towards widows or widowers with complicated grief. Therefore, the evidence for existing treatments of complicated grief is much more conclusive than the evidence for the visiting service. However, it might be extremely interesting to compare both approaches in future trials, which might even alter our point of view.

Our previous statement on the suitability of the visiting service for widowed individuals with initial high distress does also apply to widowed individuals with initial high distress. We did not find any indications that the visiting service could be (cost-)effective for widowed individuals with initial high distress, however this could have been caused by the exclusion of all widowed individuals with bereavement-related psychiatric disorders and widowed individuals with a moderate to high suicide risk. This belief is supported by the fact that the original widow-to-widow program, from which the visiting service was derived, was considered effective and that these effects were attained with the most distressed participants (Vachon, Lyall, Rogers, Freedman-Letofsky, & Freeman, 1980). However, we did exclude the widowed with potential psychiatric disorders because we believed that those individuals need professional help instead of help by a trained volunteer. Evidence-based treatments exist for all bereavement-related disorders and these are the interventions that should be administered.

In conclusion, the visiting service, like several other bereavement interventions provided by volunteers or interventions based on mutual help, could help widowed persons in adverse conditions overcome the additional stress of bereavement. Offering such interventions to those widows and widowers is even likely to be cost-effective
as well, since persons in adverse conditions are usually accountable for large health care costs. Therefore, we would recommend the visiting service (or comparable other interventions) for all the widowed in adverse conditions such as a having small social network, low socio-economic status or poor health, who have not yet developed a bereavement-related disorder. All widowed persons with a bereavement-related disorder should be offered professional help.

Finally, we would like to end this discussion with some recommendations and directions for future research. First, we would recommend different recruitment procedures for the visiting service (and comparable other interventions). Recruitment should be more focused on high risk persons or persons in adverse conditions. Instead of advertising in general or sending off information to all the widowed in the area, the visiting service (and comparable interventions) should join forces with general practitioners, home care, welfare and nursing homes. These professionals are usually acquainted with the target group and could refer candidates most likely to benefit. We do believe, however, that easily accessible bereavement interventions should remain open to self-referral (if outreaching recruitment procedures are replaced by inreaching procedures). We did not find any indications of the visiting service being harmful for participants. Although some other studies did find signs of bereavement interventions interfering with the natural grieving process, this usually applied to outreaching interventions offering help to persons who did not request it themselves (Schut et al., 2001). Moreover, universal bereavement interventions that applied inreaching procedures appeared to yield better results than outreaching bereavement interventions (Schut & Stroebe, 2005).

Second, since all our claims on benefiting high risk groups are based on post hoc analyses instead of separate randomized trials, we recommend further research on the effects of the visiting service and other comparable interventions in widowed persons in adverse conditions in order to add to the knowledge on what works for whom. At last, we would like to emphasize the importance of economic evaluations. Despite the growing knowledge on the effectiveness of bereavement interventions, we did not find cost-effectiveness or cost-utility studies. Today, information on the cost-effectiveness can be vital in the decision to implement or fund an intervention. This thesis demonstrated that the cost-effectiveness of bereavement interventions can be acceptable, especially for certain subgroups. However, much more research is needed on this topic in order to keep up with the latest developments in public mental health.

References


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