

The prevalence of anxiety disorders in old age

A meta-analysis

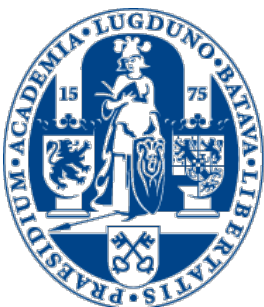
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Index

1. Introduction	4
1.1 Rationale	4
1.2 Objectives	5
2. Methods	5
2.1 Search strategy	5
2.2 Inclusion criteria	5
2.3 Data extraction	6
2.4 Statistical analyses	7
3. Results	7
3.1 Description of sample	7
3.2 Age and anxiety	10
3.3 Type of anxiety disorder	12
3.4 Publication bias	13
4. Discussion	14
4.1 Objectives	14
4.2 Limitation and strengths	15
4.3 Implications of the research findings	15
4.4 Looking forward	15
4.5 Summary and conclusion	15
References	17

Abstract

Background: Prior research shows that the prevalence of anxiety disorders decreases with age. We hypothesize that anxiety would no decrease with age when the individuals have a chronic disease; *Aim:* This study aims to summarize all existing literature on the prevalence of anxiety disorders, when having a chronic disease, in old age. The second aim is to find out which type of anxiety disorder is more prevalent in older age groups. *Methods:* We searched Pubmed in order to find articles about this subject. Data from these papers were pooled in a meta-analysis. Subgroup analysis, meta-regression and tests for publication bias were performed. *Results:* The results suggest that anxiety still decreases with age, even when the individual has a chronic disease. There was no difference in the prevalence of types of anxiety disorders between younger and older age groups. Evidence for publication bias was found. *Conclusion:* Notwithstanding some limitations such as probable publication bias, our findings suggest that the prevalence of anxiety also decreases with age when having a chronic disease.

1. Introduction

1.1 Rationale

“No, that is the great fallacy: the wisdom of old men. They do not grow wise. They grow careful” said Ernest Hemingway in his book *A farewell to arms*. When we look at literature or art, youth is often associated with health and happiness and growing older with decay. The body and mind get more fragile and this can make old individuals very careful about what movements they make and where they are going outside of the house. But is this true? Do we get more careful or fearful when we get older? Old age is often defined as the last period of human life. According to the dictionary this is now often considered as the years after 65 (Oxford English Dictionary, 2015). If we leave the ways of art behind and look at research we find that older age is associated with a decreased risk of mental health disorders, including anxiety (Gabalawy, Mackenzie, Thibodeau, Asmunden & Sareen, 2013). For example, Hybels and Blazer (2003) found in a non-institutionalized population that in the age group of 65 and older 12.3% had a mental disorder. This was lower than in younger age groups (16.9% in 18-24, 17.3% in 25-44 and 13.3% in 45-64). Anxiety was the most prevalent disorder in the age group of 65 and above (5.5%) as well as in the other age groups (Hybels & Blazer, 2003). Another study, the National Comorbidity Survey Replication, found a prevalence of 7.0% of anxiety disorders in the age group of 65 and above. In the age group of 55 and above the prevalence was 11.6% (Blay & Marinho, 2012). Similar results have been found in a number of other studies (Flint, 1994; Sable & Jeste, 2001; Setz, Purandare & Conn, 2010). In another population the prevalence of anxiety decreased with age (3.2% for the age-group 45-64, 1.4% for 65-74 and 1.0% for individuals older than 75) (Wolitzky-Taylor, Castriotta, Lenze, Stanley & Craske, 2010). So with some certainty, it can be stated that there is a negative correlation between age and the prevalence of anxiety disorders.

In the studies described above the population was considered healthy according to the definition of the absence of any chronic physical illness. If an older individual is not healthy and only has the prospect of getting more impaired over time, would this individual not experience more anxiety? Stated otherwise: would the prevalence of anxiety disorder still decrease with age in populations of individuals that have a chronic illness?

According to the research of El-Gabalawy and colleagues (2013) medical morbidity is a significant predictor of developing anxiety disorders in older individuals. And Hybels and Blazer (2003) found that old individuals with a chronic somatic illness were more likely to have an anxiety disorder than old individuals without an illness (12 vs 7% respectively). This research thus suggests that in a population with a chronic illness the odds on suffering an anxiety disorder are increased. Also, if there is a higher prevalence of anxiety disorders in older individuals with a chronic illness, than we could hypothesize that there might be some types of anxiety disorders that are particular prevalent in this population. Learning about what types of anxiety disorders are more prevalent in this population could help improve treatment and prevention plans (Beekman et al., 1998). According to Beekman

and colleagues (1998) the most prevalent types of anxiety disorders, in a population older than 55, is generalized anxiety disorder (GAD) and agoraphobia (respectively 7.3% and 3.1%) versus for example panic disorder and obsessive compulsive disorder (OCD) (1.0 vs. 0.6% respectively) Blay and Marinho (2012) also found that older individuals with a chronic illness were more likely to have GAD or phobic disorder, in this case agoraphobia, compared to younger age groups with a chronic illness (2.0% vs. 1.2% for GAD and 6.5% vs. 4.7% for Phobia) if they had an anxiety disorder.

With more and more people ageing in the western world and with the possibility of reaching a higher age than before (with associated physical and mental decay) we are prone to meet more medical and psychological problems in this age group. In the case of anxiety, some of the the symptoms associated with anxiety, for example avoiding public places or crowds, (DSM-5, APA, 2014) tend to alienate old individuals from the outside world. We want to learn more about the prevalences of anxiety in individuals with a chronic disease and observe if this influences the tendency of anxiety to decrease with age.

1.2 Objectives

The aim of this study is therefore to summarize all existing literature on the following question: Do older individuals with a chronic illness have a higher risk of anxiety disorder than individuals in younger age groups with a chronic illness? And: which anxiety disorder is more prevalent in older individuals with a chronic illness?

From the notions derived from the existing literature we could formulate the following hypotheses:

1. Older individuals with a chronic illness have a higher prevalence of anxiety disorders than younger age groups with a chronic illness.
2. GAD and agoraphobia are more prevalent in older individuals with a chronic disease compared to younger age groups with a chronic disease, than other anxiety disorders.

2. Methods

2.1 Search Strategy

For our selection we used the electronic database Pubmed (up to and including november 2015) using the search term (anxiety disord*) AND (prevalen* OR inciden*) AND (somatic* OR medical* OR hospital* OR inpatient) AND (elderly OR late life OR midlife)

2.2 Inclusion criteria

Our eligibility criteria were being over 18 years old and having a chronic disease. For this we employed the definition of a chronic disease by the U.S. National Center for Health Statistics (NCHS; 2012): ‘a disease that persist for a longer period of time (at least three months). This disease is not transmittable between individuals and cannot easily be cured with medicine’ (NCHS; 2012). Some-

times a psychiatric disorder was reported as a chronic disease (for example, schizophrenia or bipolar disorder) and we excluded these papers due to comorbidity with anxiety disorders to ensure that this would not overestimate our effects. We included papers in the following languages: English, Dutch, German, French and Spanish. Another inclusion criterion was that the diagnosis should be DSM/ICD based and the disorder should be current or have a 6 or 12-month prevalence. Articles that reported only lifetime prevalences were excluded. Finally, only papers from 1990 and younger were considered.

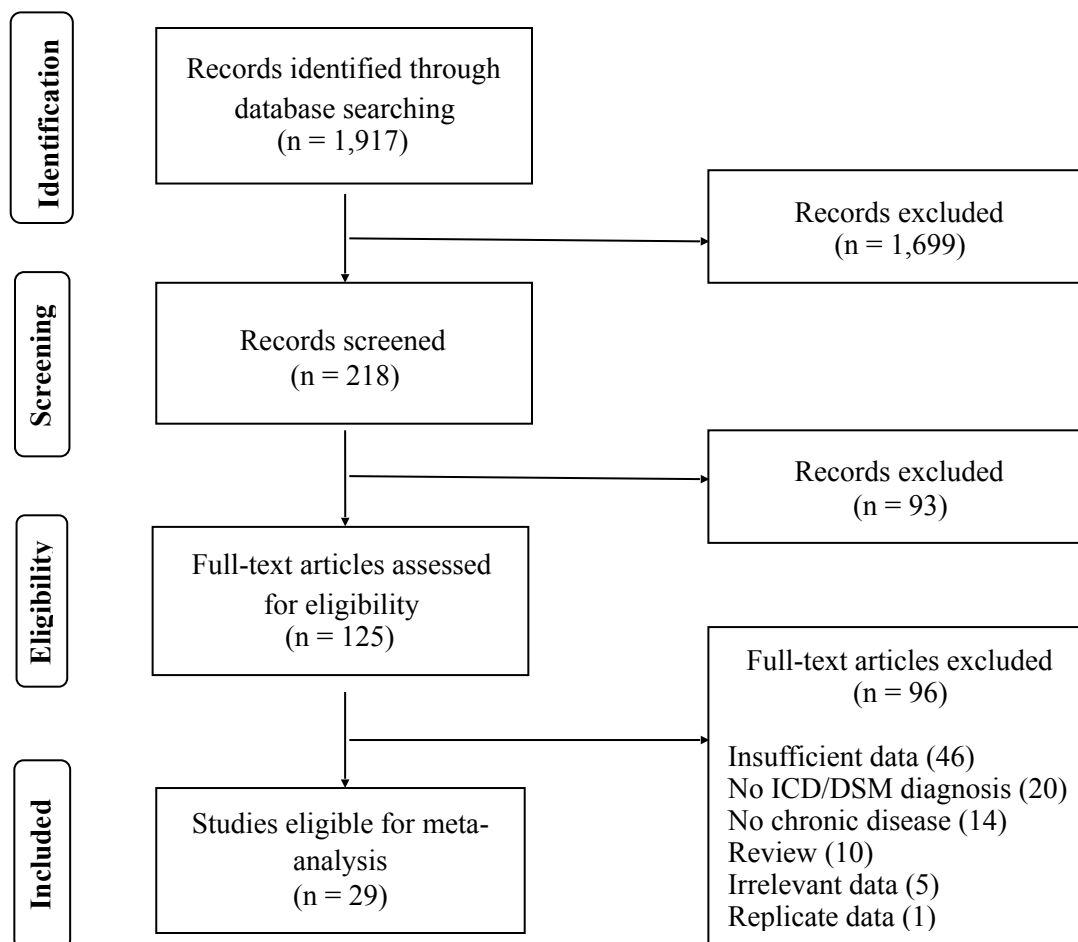


Figure 1.

Flow Diagram of the Article Selection (November 16, 2015 – January 26, 2016) Note. ICD = International Statistical Classification of Diseases and Related Health Problems. DSM = Diagnostic and Statistical Manual of Mental Disorders. Design adapted from Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G., & PRISMA Group (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Public Library of Science Medicine* 6(7): e1000097. doi:10.1371/journal.pmed1000097

2.3 Data Extraction

We extracted the event rate of an anxiety disorder from the selected papers. Also, the age category, the percentage of females, the type of anxiety disorder (if specified) and the type of chronic disease (if specified) was extracted.

2.4 Statistical Analyses

The analyses were performed by using the Comprehensive Meta-Analysis program, third version (CMA 3.0) (Borenstein, Hedges, Higgins & Rothstein, 2010).

To test the first hypothesis a subgroup analysis was conducted with the three age categories as subgroups and the prevalence rates of having an anxiety disorder as the events. To test the second hypothesis, again, a subgroup analysis was conducted to compare the prevalences of the different types of anxiety disorders per age group.

The statistical heterogeneity was assessed by conducting a Chi² test with a significance level of $p < .05$ and the I² statistic. We chose to consider an I² statistic higher than 50% because more than half of the variation across the studies is then explained by heterogeneity instead of sampling errors and it would be useful to continue analyzing (Higgins and Thompson, 2002). In this research the random-effects model was used because we presume that there is a distribution of effect sizes in our papers instead of one true effect size and consequently, according to the random effects model we want to give an estimate of the mean of this distribution (Borenstein, et al., 2010). Also, if the variation in this research is trivial and the studies are homogeneous the random effects model seems to fit best (Borenstein et al., 2010).

An assessment of publication bias across studies was performed using Duvall and Tweedies' trim and fill method (Duval & Tweedie, 2000) and Eggers' test of the intercept (Egger, Smith, Schneider & Minder, 1997).

3. Results

3.1 Description of Samples

We found 1917 papers that matched our search terms. After a first screening based on the titles we excluded 1699 articles. With the remaining 218 papers we did a second selection round based on the abstract (and in case of any doubt on the full text). In this round we excluded 93 papers. After reading the full-text of the remaining 125 papers we excluded 96 papers (specifics on the exclusion criteria are shown in figure 1). At the end of the selection process we included 29 papers in our analysis. In table 1 we give an overview of the selected papers and their characteristics. As described previously, we only used articles that reported current diagnosed disorders or with a maximum of a 12-month prevalence. Seven out of the thirty papers reported 12-month prevalences (as reported in Table 1) and the rest reported current/point prevalences. An analysis of these two subgroups showed that the point estimate of the point prevalence and the 12-month prevalence were respectively .064 (95% CI: .052-.078) and .090 (95% CI: .062-.128). The heterogeneity was .106. Because there was no significant difference between these two subgroups they were, in this research, analyzed and reported together. The articles reported different age categories or only mean ages of

Table 1. Basic characteristics of the included studies

Author, year	Sample size	Age category	% female	Type of anxiety disorders	Chronic Disease	Diagnosis
Baladón et al. (2015) ^[1]	1.193	55-75 & 75 >	57	Agoraphobia, GAD, OCD, Panic Disorder, SAD, Specific Phobia	Chronic Disease	12 month
Baubet et al. (2010) ^[1]	100	< 55	86	Agoraphobia, GAD, OCD, Panic Disorder, SAD	Systemic Sclerosis	Point
Bromberg et al. (2003) ^[1]	22	< 55	59	GAD	Congenital Heart Disease	Point
Cardona-Castrillon et al. (2007) ^[1]	89	< 55	15	GAD, OCD, Panic Disorder, PTSD, SAD, Specific Phobia	Migraine	12 month
Castro et al. (2009) ^[1]	400	< 55	83	Agoraphobia, GAD, OCD, Panic Disorder, PTSD, SAD, Specific Phobia	Chronic Pain	Point
Chignon et al. (1993) ^[1]	50	< 55	48	Panic Disorder	Cardiac Disorder	Point
Cumurcu et al. (2006) ^[1]	73	< 55	70	GAD, OCD, Panic Disorder	Pseudoexfoliative Glaucoma, Primary open-angle Glaucoma	Point
De Miguel Diez et al. (2011) I	1.321	< 55 & 55 - 75 & 75 >	0	Anxiety Disorder	Chronic Bronchitis	12 month
De Miguel Diez et al. (2011) II	1.650	< 55 & 55 - 75 & 75 >	0	Anxiety Disorder	Asthma	12 month
El-Miedany et al. (2002)	80	< 55	70	Anxiety Disorder	Rheumatoid Arthritis	Point
Gerhardt et al. (2011) ^[1]	110	< 55	57	Agoraphobia, Panic Disorder, SAD, Specific Phobia	Chronic Back Pain	Point
Golden et al. (2005) ^[1]	90	< 55	26	OCD, Panic Disorder	Hepatitis C	Point
Haworth et al. (2005) ^[1]	100	55-75	11	GAD, Panic Disorder	Chronic Heart Failure	Point
Ho et al. (2010) ^[1]	89	< 55	56	GAD, OCD, Panic Disorder, PTSD, Specific Phobia	Chronic Pain	Point
Huang et al. (2010)	5.685	< 55 & 55-75	0	Anxiety Disorder	Diabetes	Point
Juang et al. (2000) ^[1]	517	< 55	0	GAD, OCD, Panic Disorder, PTSD, SAD	Chronic Daily Headache, Transformed Migraine, Chronic Tension Type Headache, New Daily Persistent Headache, Hemicranial Continua	Point

Table 1. Basic characteristics of the included studies-1

Knaster et al. (2012) ^[1]	100	< 55	62	Agoraphobia, GAD, OCD, Panic Disorder, PTSD, SAD, Specific Phobia	Chronic Pain	12 month
Korostil et al. (2007) ^[1]	140	< 55	74	GAD, OCD, Panic Disorder, SAD, Specific Phobia	Multiple Sclerosis	Point
Li et al. (2012) ^[1]	1995	< 55	54	Agoraphobia, GAD, OCD, Panic Disorder, SAD, Specific Phobia	Gastrointestinal Problems	Point
Lok et al. (2010) ^[1]	200	< 55	79	Agoraphobia, GAD, OCD, Panic Disorder, PTSD, SAD, Specific Phobia	Rheumatoid Arthritis	Point
Mackenzie et al. (2011) ^[1]	353	55-75 & 75 >	75	GAD	Chronic Disease	12 month
Maia et al. (2014) ^[1]	110	55-75	54	Agoraphobia, GAD, Panic Disorder, SAD	Diabetes Type 1	Point
Matsuda et al. (2009) ^[1]	70	< 55	67	Panic Disorder	Chronic Fatigue	Point
Ming et al. (2014) ^[1]	315	55-75	89	GAD	Cancer	Point
Peluso et al. (2015) ^[1]	44	55-75	88	GAD, Specific Phobia	Chronic Dizziness of vestibular origin	12 month
Todaro et al. (2007) ^[1]	150	55-75	32	Agoraphobia, GAD, OCD, Panic Disorder, PTSD, SAD, Specific Phobia	Coronary Heart Disease	Point
Van der Aa et al. (2015) ^[1]	615	75 >	61	Agoraphobia, GAD, Panic Disorder, SAD	Visual Impairment	Point
Versteeg et al. (2013)	610	55-75	18	Anxiety Disorder	Ischemic Heart Disease	Point
Vögele et al. (2007) ^[1]	20	55-75	30	Panic Disorder, PTSD, SAD, Specific Phobia	Chronic Obstructive Pulmonary Disease	Point

Note: GAD= Generalized Anxiety Disorder, SAD= Social Anxiety Disorder, PTSD= Post- Traumatic Stress Disorder, OCD= Obsessive Compulsive Disorder.

^[1]: Studies included in the subtype of anxiety disorder analysis.

their population. In total this came down to approximately fifteen age categories. To be able to make clear comparisons of the prevalence of anxiety in the different ages, we made three age categories that fitted the data best; the definition of old age (as discussed earlier) is 65 years and older. Half of the categories in the papers extended their range of ‘old age’ to 55 years. Therefore we chose to include all ages below 55 in our first category and name this the ‘young’ age group. There also seemed to be a divide between older individuals and ‘very old’ individuals. Some papers only selected individuals over the age of 75 as old individuals. Therefore our second category runs from 55 years till 75 years old. Consequently, our third category included individuals over the age of 75.

The studies found reported the prevalences of anxiety in general, but also those of different types of anxiety. If we chose to just analyze anxiety in general, we would lose the information on the different types of anxiety. Therefore, we chose to make a different case for the types of anxiety disorders per age category. This makes the number of effect sizes processed higher than the number of studies found. In total this came down to 182 effect sizes (< 55= 131, 55-75= 31 and 75 > = 20). The sample sizes in the selected papers differed from N=20 to N=5685, the total N was 16291 and the age range was 18-98.

3.2 Age and anxiety

After conducting the subgroup analysis the following results are observed: in the age group 55 and younger an anxiety prevalence of .075 was found (95% CI: .061 - .093). In the age group 55-75 a prevalence of .084 was found (95% CI: .055-.127) and in the age group 75 and older a prevalence of .025 was found (95% CI: .014- .046). Heterogeneity was assessed between the estimates (Q-value = 12.717 p-value < .05). The $I^2 = 96,3\%$. The results are shown in table 4. These results showed a significant effect for the variables age and anxiety. When comparing the different age groups with each other we found that the oldest age group (75>) has significantly lower prevalence of anxiety than the other two age categories used in this research. The age categories <55 vs 55-75 did not show significant differences in anxiety prevalences. Table 5 gives an overview of these results. The scatterplot (figure 4) gives a view of the possible direction of the effect. Based on these results our first hypothesis cannot be accepted.

Table 4. Results of the prevalence of any anxiety disorder per age group

	<i>k</i>	<i>N</i>	Prevalence (95% CI)	Test of the Null Hypothesis	Heterogeneity	
				<i>Z</i>	<i>I</i> ²	<i>Q</i>
< 55	131	6779	.075 (.061 — .093)	-21.309**		
55-75	31	5859	.084 (.055 — .127)	-10.103**		
75 >	20	2474	.025 (.014 — .046)	-11.702**		
Total between					96,29%	12.717*
Overall	182	15112	.069 (.057 — .082)	-26.084**		
*statistical significance	at $p < .01$.					
**statistical significance	at $p < .001$.					

Regression of Logit event rate on Age

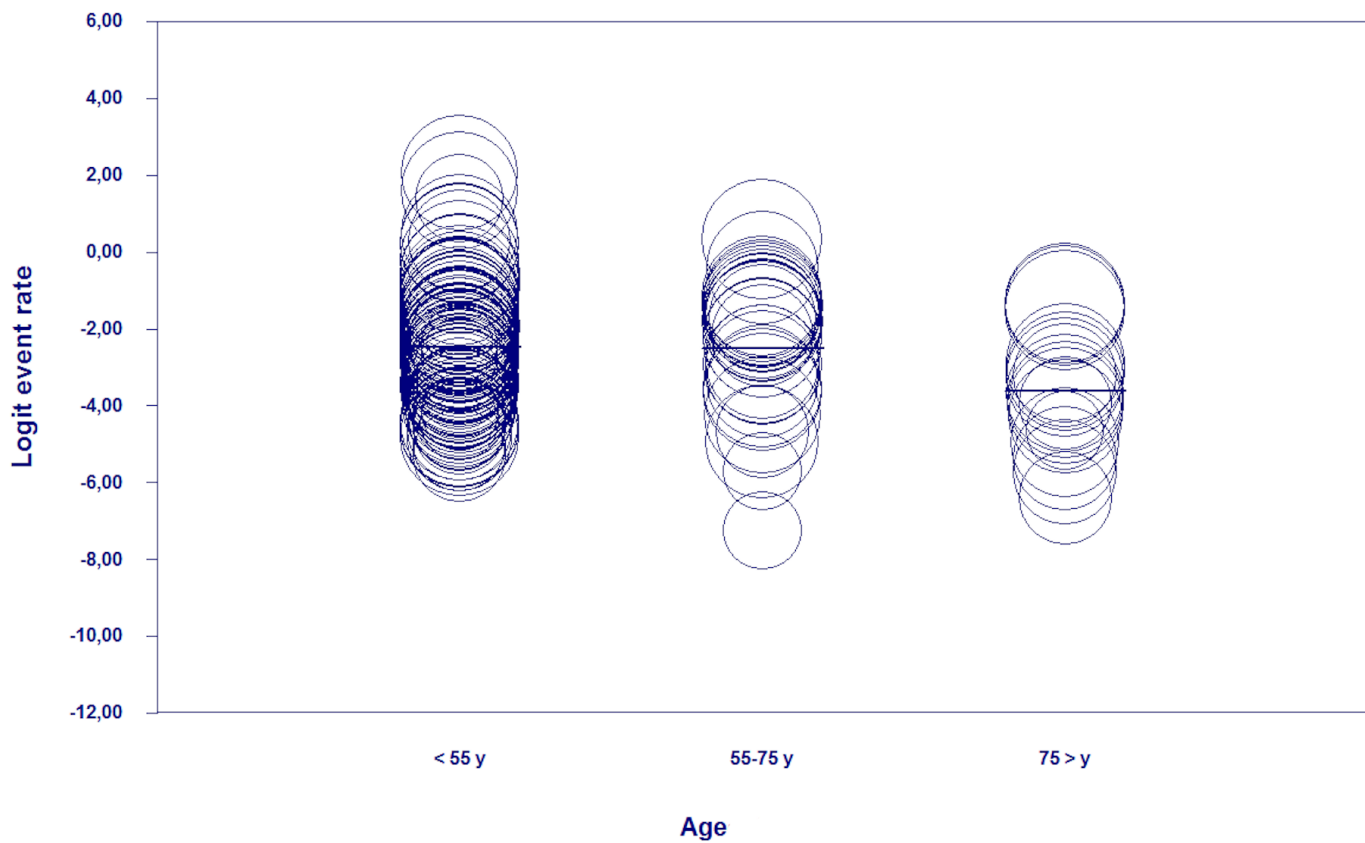


Figure 4. Scatterplot of the variable Age on the prevalence of anxiety

Table 5. results of the comparison of the age groups on the prevalence of any anxiety disorder

	<i>k</i>	<i>N</i>	Prevalence (95% CI)	Heterogeneity	
				<i>I</i> ²	<i>Q</i>
< 55 vs 55-75				96,37%	.209
< 55	131	6779	.075 (.060 – .093)		
55-75	31	5859	.084 (.054 – .127)		
< 55 vs 75 >				96,29%	10.729*
< 55	131	6779	.074 (.059 – .093)		
75 >	20	2474	.025 (.013 – .046)		
55-75 vs 75 >				96,03%	13.422*
55-75	31	5859	.087 (.060 – .125)		
75 >	20	2474	.027 (.016 – .045)		

*statistical significance at $p < .001$.

3.3 Type of anxiety disorder

The second research question was whether a specific type of anxiety disorder is more prevalent in the older age groups compared to the younger age group. The studies that did not report the subtypes of the anxiety disorder were excluded from this analysis (see table 1). The results are reported in table 6. The three most prevalent types of anxiety disorders in the two younger categories (<55 and 55-75) were respectively GAD, panic disorder and SAD. In the oldest age category (75>) the three most prevalent types were respectively specific phobia, GAD and agoraphobia. We cannot entirely accept our second hypothesis because GAD was even more prevalent in the younger age groups. Agoraphobia, on the other hand, was more prevalent in the older age group than the younger age group, supporting our hypothesis.

Table 6. Results of the comparison of all the age groups for the prevalence of types of anxiety disorders.

Type of anxiety disorder	< 55		55-75		75 >	
	Prevalence	(95% CI)	Prevalence	(95% CI)	Prevalence	(95% CI)
Agoraphobia	.037	(.011 – .119)	.023	(.005 – .099)	.031	(.007 – .121)
GAD	.092	(.052 – .158)	.174	(.081 – .335)	.036	(.011 – .114)
OCD	.029	(.012 – .069)	.002	(.000 – .020)	.006	(.001 – .046)
Panic disorder	.083	(.042 – .158)	.080	(.027 – .214)	.005	(.001 – .021)
PTSD	.035	(.013 – .093)	.003	(.000 – .117)	-	-
SAD	.081	(.035 – .180)	.057	(.016 – .180)	.015	(.004 – .061)
Specific phobia	.057	(.018 – .163)	.115	(.035 – .316)	.046	(.009 – .210)

Note: GAD = Generalized Anxiety Disorder, OCD= Obsessive Compulsive Disorder, PTSD= Post-Traumatic Stress Disorder, SAD= Social Anxiety Disorder.

3.4 Publication bias

Visual inspection of the funnel plot shows an asymmetric distribution to the left (see funnel plot depicted in figure 5). Egger's test of the intercept which allows to include the impact of more factors on the observed effect shows significant results (Egger, Smith, Schneider & Minder, 1997) : intercept = -3.21 with an 95% CI (-4.38, -2.03) with $t=5.40$, $df=180$ gives a 1-tailed $p < .001$ and a 2-tailed p -value $< .001$. However, the observed asymmetry could represent true heterogeneity of the studies; an association of the effect (Tang & Liu, 2000). This is one of the main explanations of the asymmetry of the funnel besides publication and selection bias (Tang & Liu, 2000). Since the asymmetry is to the left it could represent the low prevalence of anxiety in the older age category. Which is the main result found in the study. However, we should be careful with the interpretation and generalization of the results because we cannot confidently state that there is no publication bias.

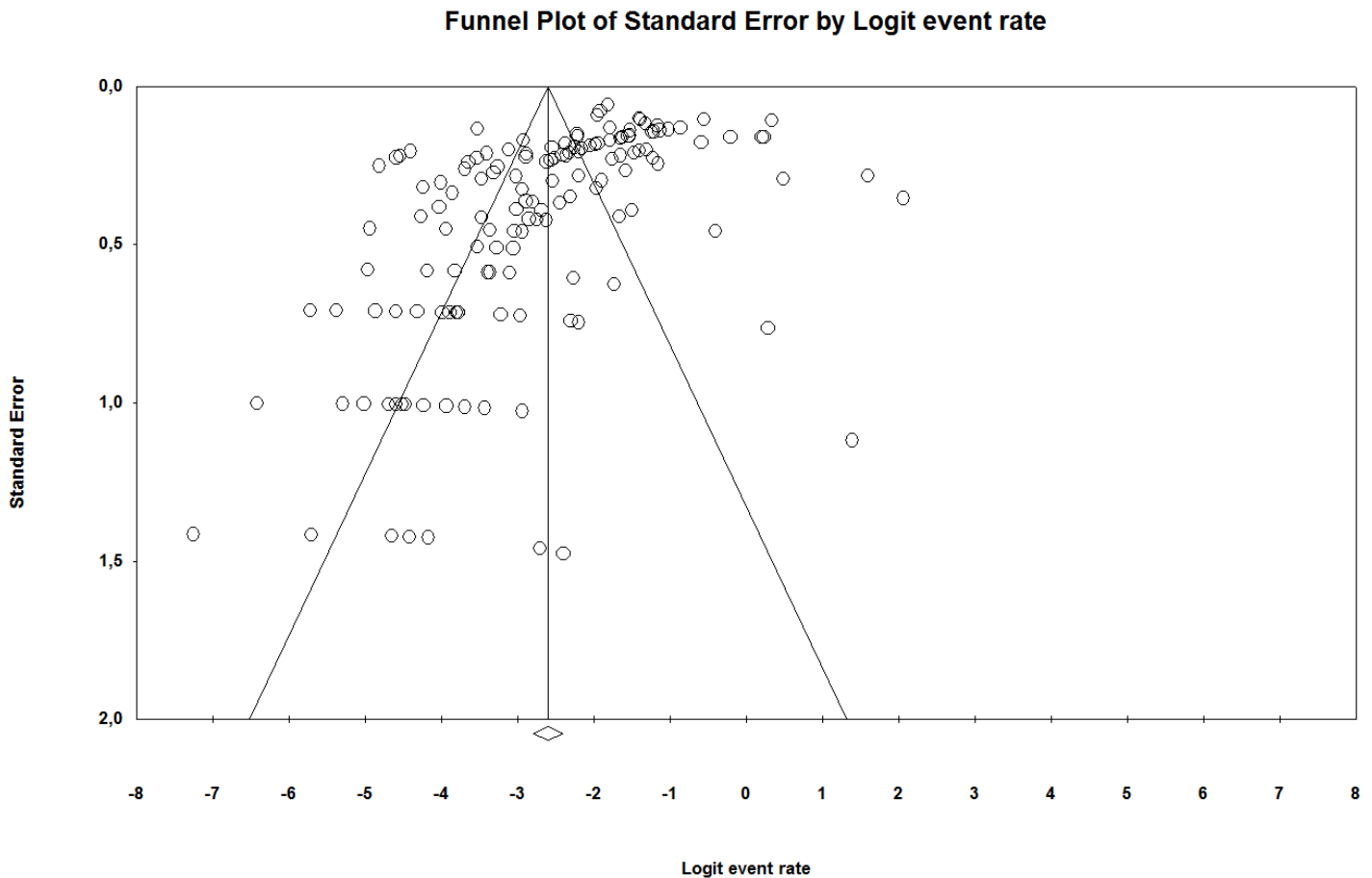


Figure 5. Funnel plot for publication bias

4. Discussion

4.1 Objectives

The first research question aimed to find out if older age groups have a higher prevalence of anxiety disorders than younger age groups, when having a chronic disease. As stated previously, in a population without a chronic disease the prevalence of anxiety decreases with age (Wolitzky-Taylor et al. 2010). Our results suggest that the prevalence of anxiety does not increase with age, when having a chronic disease, therefore we can not accept our first hypothesis.

The direction of the effects we found could be different if there were more studies available where the population was over 75 years old. This age category brought us the least number of studies (20 versus 31 and 131 for the two younger age categories) which may be too few to make a proper comparison with the younger age groups. Having more studies in this age group could alter the effect found in our study.

If this is not the case, it is possible that younger patients with a chronic disease are more prone to having an anxiety disorder because the prospect of early physical decay (in some cases), may be scary and depressing. They are probably still full of life and they find out that their life plans have to change. Of course this is only the case with more 'serious' chronic diseases like cancer or diabetes (allergies, for example do also fall into the category of a chronic disease).

From previous research mentioned in the introduction, there does seem to be an impact of having a chronic disease on the prevalence of anxiety disorders in old age (Hybels & Blazer, 2003 and El-Gabalawy et al. 2013). But our study was not able to find the same effect. The studies mentioned in the introduction focused more on the risk factor of having a chronic disease for the prevalence of anxiety disorders and based their conclusions on smaller sample sizes. Our study was able to incorporate more studies and a larger sample size to make our findings more reliable. These studies also reported more serious medical comorbidity than our definition of a chronic disease (Hybels & Blazer, 2003 and El-Gabalawy et al. 2013). This makes a difference in the severity of the chronic disease and therefore could influence the prevalence of anxiety disorders.

Our second research question aimed to find out which type of anxiety disorder is most prevalent in the older age groups and with the hypothesis that GAD and agoraphobia are probably most prevalent. Our results suggested that there was no difference in the prevalence of GAD in the three age categories, but agoraphobia was more prevalent in the older age category than in the younger categories. The prevalences found for GAD in this study closely match the general lifetime prevalence of 5% and the 12% diagnosis rate at an anxiety-disorder clinic (Rachman, 2004). The oldest age group (75 years and older) had the fewest studies in our meta-analysis and makes our results less reliable. Having more studies in this age group could give us a better insight in the prevalence of different types of anxiety disorders for individuals over 75 years old.

4.2 Limitations and strengths

A strength of our study is the reasonable amount of papers included in the meta-analysis. Especially the large sample sizes in the studies found could help us generalize the findings from our meta-analysis. This study also has some limitations; even though we have a good amount of studies to make the results more reliable, the studies concerning the oldest age group (75>) are a little scarce. Including more studies for this age group could possibly give a better image of the course of anxiety over the years. Another limitation is the classification of the chronic diseases. We used the general definition of a chronic disease for inclusion in our study and this was probably too broad. For example, an allergy was defined as a chronic disease as well as cancer. It could be stated with certainty that the seriousness and impact of having cancer is much bigger than that of having an allergy. The severity of the chronic disease could have an impact on the prevalence of anxiety. In this study we could have selected only 'severe' chronic diseases or we could have made different subgroups for the severity of the chronic disease to find out if this influences the prevalence of anxiety.

4.3 Implications of the research findings

The results from this study shows that anxiety decreases over age, even with the presence of a chronic disease . If these results are found repeatedly in future research then no extra measurements need to be taken in terms of prevention and treatment of anxiety in this population when they have a chronic disease.

Concerning the prevalence of different types of anxiety disorders, these results give us information about the prevalences of those types in old age. For example, from the results of our study, most types seem to decrease with age, whereas agoraphobia is most prevalent in the oldest category, thus increases with age.

4.4 Looking forward

The studies found in this meta-analysis are probably not sufficient to make a statement about the effect of having a chronic disease on the prevalence of anxiety disorders in older age groups. We had a total sample size of 16292 which is a good, but the percentage of the oldest age group in this sample size is very low, about 12%. It is difficult to compare such a smaller sample size to a large one and still show reliable results. Thus, the sample size is big enough, but the proportion of the age groups should be more equal to each other.

So, for further research it would be interesting to recruit a large group of participants with old age (and preferably a chronic disease, in this case), and then compare it to an equally large group of younger participants with a chronic disease.

4.5 Summary and conclusions

Previous research showed that the prevalence anxiety decreases over age (Hybels and Blazer, 2003). Our study aimed to find out if this effect was the same when the individuals have a chronic disease. Our results suggest that the presence of a chronic disease does not change this effect; anxi-

ety still decreases with age. There does seem to be a discrepancy in the prevalence of different types of anxiety disorder in individuals over the age of 75. The most prevalent disorders in this age group were specific phobia, GAD and agoraphobia, whereas in the younger age groups these were GAD, panic disorder and SAD. But, due to a small number of studies in the oldest age category we cannot be too confident about generalizing these results.

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References marked with an asterisk indicate studies included in the meta-analysis

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