

Versorgungsforschung und gesundheitliche Ungleichheit

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1. Sozialepidemiologie und Versorgungsforschung
2. Soziale Ungleichheit und Versorgung
3. Der Beitrag der Versorgung zu gesundheitlichen Ungleichheiten
4. Fazit (Perspektiven und Herausforderungen)

- Medizinsoziologische Versorgungsforschung und Sozialepidemiologie existieren weitgehend unverbunden nebeneinander.
- Konzepte der Sozialepidemiologie können sinnvolle Beiträge zur VF leisten, weil die zugrundeliegenden sozialen Faktoren nicht nur die Gesundheit, sondern häufig auch die gesundheitliche Versorgung beeinflussen.
- Beispiele:
 - **Soziale Beziehungen** hängen mit Adhärenz, Inanspruchnahme von Leistungen und Versorgungsergebnissen (Outcomes) zusammen.
 - **Psychosoziale Arbeitsbelastungen** in Gesundheitsberufen können die Qualität der erbrachten Leistungen beeinträchtigen.
 - **Soziale Ungleichheit** hängt mit dem Zugang, der Inanspruchnahme und der Qualität der Versorgung zusammen. (Details folgen)

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DEBATE

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Concepts of social epidemiology in health services research



Olaf von dem Knesebeck

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Es ist sinnvoll, zwischen **Ungleichheit im Zugang, in der Inanspruchnahme und in der Qualität** der Versorgung zu unterscheiden.

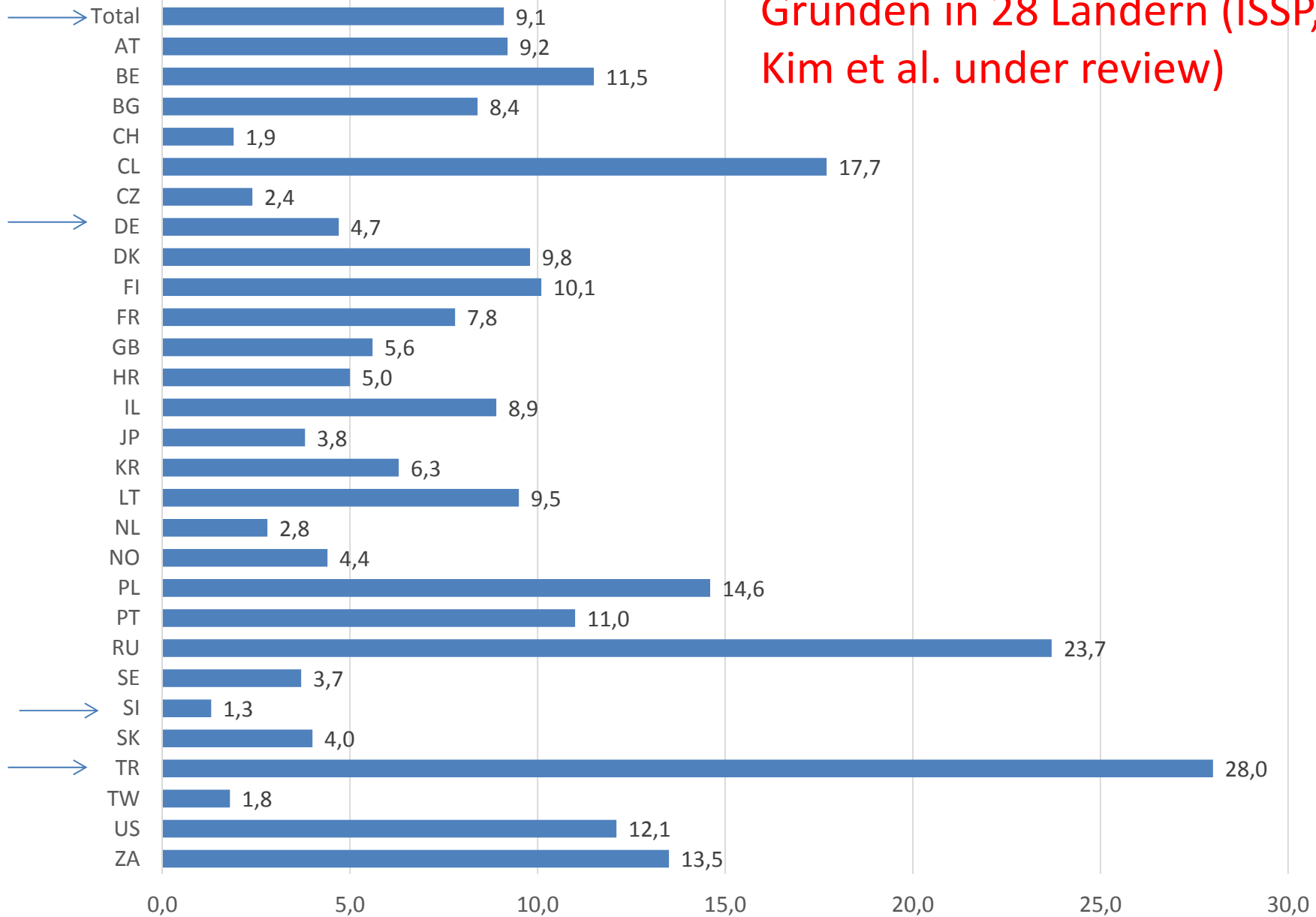
- Indikatoren für Zugang (Versorgungssystem): z.B. Wartezeiten, Zuzahlungen, Leistungen für privat vs. gesetzlich Versicherte
- Indikatoren für Inanspruchnahme (Individuum): z.B. Arztkontakte, Teilnahme an Vorsorgeuntersuchungen (unterschiedliche Möglichkeiten vs. unterschiedliche Präferenzen)
- Qualitätsindikatoren: Struktur (z.B. technische Ausstattung), Prozess (z.B. Durchführung von diagnostischen und therapeutischen Verfahren, Arzt-Patienten-Kommunikation), Ergebnis (z.B. Patientenzufriedenheit, QoL, Überlebensraten, Rezidive)

Beispiel für Zugang: Finanzielle Barrieren („Forgone care“/“Unmet needs“)

Tab. 1 Zuzahlungen, finanzielle Belastung und darin begründeter Verzicht auf medizinische Versorgung im Zeitraum von zwölf Monaten (Standardfehler in Klammern; deutsches Sub-sample von SHARE Welle 1 von 2004; $n = 2851$) (Darstellung nach [21])

Einkommen	Summe der Zuzahlungen in €	Anteil Zuzahlungen vom Einkommen in %	Häufigkeit zuzahlungsbedingter Verzicht in %
1. Quintil (niedrig)	156,25 (10,39)	3,1 (0,004)	8,9 (0,01)
2. Quintil	215,83 (25,63)	1,3 (0,002)	6,2 (0,01)
3. Quintil	203,67 (17,4)	0,9 (0,001)	5,8 (0,01)
4. Quintil	206,02 (17,98)	0,5 (0,001)	5,4 (0,01)
5. Quintil (hoch)	326,24 (57,34)	0,4 (0,001)	1,8 (0,01)
Mittelwert	215,15 (12,18)	1,2 (0,001)	5,6 (0,04)

Forgone care aus finanziellen Gründen in 28 Ländern (ISSP, Kim et al. under review)



Mehrebenenanalyse forgone care (ISSP, Kim et al. under review)

	Model 1 OR (CI95)	Model 2 OR (CI95)	Model 3 OR (CI95)
Fixed parts			
Monthly household equivalent income (0 = country specific upper tertile)			
Medium tertile	2.10 *** (1.66-2.66)	1.76 *** (1.36-2.29)	1.77 *** (1.36-2.30)
Lower tertile	3.94 *** (2.96-5.24)	2.94 *** (2.16-3.99)	2.95 *** (2.17-4.01)
Age (0 = 16-40 years)			
41 – 60 years		0.77 *** (0.68-0.87)	0.77 *** (0.68-0.87)
61 years and older		0.44 *** (0.37-0.51)	0.44 *** (0.37-0.51)
Gender (0 = Male)			
		1.33 *** (1.19-1.49)	1.33 *** (1.19-1.49)
Subjective health (0 = good)			
		2.54 *** (2.26-2.85)	2.53 *** (2.26-2.84)
Educational level (0 = high educational level)			
Medium		1.02 (0.86-1.20)	1.02 (0.87-1.19)
Low		1.19 * (1.00-1.41)	1.18 * (1.00-1.41)
Region (0 = living in a village or smaller)			
		1.32 *** (1.18-1.47)	1.32 *** (1.18-1.47)
Insurance coverage (0 = well covered)			
		2.87 *** (2.53-3.26)	2.87 *** (2.53-3.26)
Public Health Expenditure, PHE (0 = over 80% of total health expenditure, THE)			
60 - 80% of THE			2.22 * (1.09-3.68)
Less than 60% of THE			1.42 (0.62-3.27)
THE per capita, median split (0 = > 2500 US\$ per capita)			
			0.87 (0.45-1.71)
Random parts			
Between-state variance	1.109	0.791	0.696
Intra Class Correlation (ICC)	0.252	0.194	0.175
AIC	10,924	9,967	9,967
Deviance	10,905	9,933	9,927
N _{Countries}	28	28	28
N _{Individuals}	20,305	20,305	20,305

Beispiel für Inanspruchnahme: Früherkennungsuntersuchungen

Tab. 2 Vollständige Inanspruchnahme der Früherkennungsuntersuchungen U3 bis U9 bei Kindern im Alter von 7 bis 13 Jahren (Odds Ratios und 95 %-Konfidenzintervalle) (Darstellung nach [30])

		KiGGS-Basis (2003–2006; $n = 6361$)	KiGGS Welle 1 (2009–2012; $n = 4275$)
Sozialstatus	Niedrig	0,48 (0,36–0,66)***	0,58 (0,37–0,90)*
	Mittel	0,97 (0,75–1,24)	0,79 (0,60–1,04)
	Hoch	1,00	1,00
Krankenversicherung	AOK	0,96 (0,66–1,40)	0,86 (0,60–1,24)
	Andere GKV	0,99 (0,71–1,37)	1,02 (0,75–1,39)
	PKV/Beihilfe	1,00	1,00

Odds Ratios adjustiert für Geschlecht, Alter, West/Ost, Stadt/Land, ältere Geschwister, Alter der Mutter bei Geburt, allgemeiner Gesundheitszustand und jeweils wechselseitig Sozialstatus bzw. Krankenversicherung.

* $p < 0,05$; *** $p < 0,001$.

Christian Janssen · Enno Swart
Thomas von Lengerke *Editors*

Health Care Utilization in Germany

Theory, Methodology, and Results



Review article

Socioeconomic inequalities in prostate cancer survival: A review of the evidence and explanatory factors



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ABSTRACT

Although survival rates after prostate cancer diagnosis have improved in the past two decades, survival analyses regarding the socioeconomic status (SES) suggest inequalities indicating worse prognosis for lower SES groups. An overview of the current literature is lacking and moreover, there is an ongoing discussion about the underlying causes but evidence is comparatively sparse. Several patient, disease and health care related factors are discussed to have an important impact on disparities in survival. Therefore, a systematic review was conducted to sum up the current evidence of survival inequalities and the contribution of different potential explanatory factors among prostate cancer patients.

The PubMed database was screened for relevant articles published between January 2005 and September 2014 revealing 330 potentially eligible publications. After systematic review process, 46 papers met the inclusion criteria and were included in the review.

About 75% of the studies indicate a significant association between low SES and worse survival among prostate cancer patients in the fully adjusted model. Overall, hazard ratios (low versus high SES) range from 1.02 to 3.57. A decrease of inequalities over the years was not identified. 8 studies examined the impact of explanatory factors on the association between SES and survival by progressive adjustment indicating mediating effects of comorbidity, stage at diagnosis and treatment modalities.

Eventually, an apparent majority of the obtained studies indicates lower survival among patients with lower SES. The few studies that intend to explain inequalities found out instructive results regarding different contributing factors but evidence is still insufficient.



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BMJ Open Socioeconomic status and health-related quality of life among patients with prostate cancer 6 months after radical prostatectomy: a longitudinal analysis

Beispiel für Ergebnisqualität

Jens Klein,¹ Kerstin Hofreuter-Gätgens,¹ Daniel Lüdecke,¹ Margit Fisch,² Markus Graefen,³ Olaf von dem Knesebeck¹

Table 3 Socioeconomic status (SES) and health-related quality of life at follow-up (QLQ-C30: global quality of life and functional scales): generalised estimating equations (standardised regression coefficients β † and 95% CIs)

QLQ-C30-subscale	SES indicator	Basic model‡		Basic model+disease factors		Basic model+patient factors		Basic model +healthcare factors		Full model (basic model+all factors)	
		B	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
Global quality of life	Income	0.15*	0.01 to 0.29	0.14*	0.01 to 0.27	0.14	0.00 to 0.28	0.09	-0.04 to 0.23	0.09	-0.03 to 0.22
	Education	0.12*	0.01 to 0.23	0.12*	0.01 to 0.23	0.11	0.00 to 0.21	0.13*	0.03 to 0.24	0.12*	0.01 to 0.23
	Occupation	0.16**	0.05 to 0.28	0.17**	0.06 to 0.28	0.10	-0.01 to 0.21	0.14*	0.03 to 0.25	0.11*	0.01 to 0.21
Physical function	Income	0.19***	0.10 to 0.29	0.16***	0.08 to 0.25	0.18***	0.09 to 0.28	0.18***	0.08 to 0.28	0.15**	0.06 to 0.24
	Education	0.15**	0.06 to 0.23	0.14**	0.06 to 0.23	0.13**	0.04 to 0.22	0.15**	0.07 to 0.24	0.13**	0.04 to 0.22
	Occupation	0.16***	0.08 to 0.24	0.16***	0.08 to 0.23	0.12**	0.04 to 0.21	0.15***	0.07 to 0.23	0.12**	0.04 to 0.21

Basic model: SES (income OR education OR occupation), age.

Disease factors: tumour stage, Gleason score, surgical margin status.

Patient factors: comorbidity, coping, social support.

Healthcare factors: barriers of access, number of utilisations, perceived quality of information.

†Values in bold are significant (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; Wald- χ^2 test).

‡Further analysis was conducted only when β was statistically significant ($p < 0.05$) in basic model.

Zusammenfassung: Soziale Ungleichheit und Versorgung I

- Insgesamt besteht immer noch ein Forschungsdefizit und ein inkonsistentes Bild.
- Höhere Statusgruppen/privat Versicherte nehmen vermehrt Fachärzte und präventive Maßnahmen in Anspruch (inzwischen relativ häufig untersucht).
- Zugang: untere Statusgruppen/gesetzlich Versicherte sind häufig benachteiligt (einige Studien, methodische Qualität sehr unterschiedlich).
- Befunde zu Unterschieden in der Prozess- und Ergebnisqualität ergeben ein ambivalentes Bild (wenige Studien).

Zusammenfassung II

- Soziale Ungleichheiten bezüglich Zugang, Inanspruchnahme und Qualität legen unterschiedliche Interventionen zur Reduzierung dieser Disparitäten nahe.
- Bedeutung/Interpretation von Versorgungsungleichheiten:
 - Studien zu Zugang/Inanspruchnahme: Gesundheitsrelevanz?
 - Studien zu Ergebnisqualität: Bezug zur Versorgung?
 - Sind alle Versorgungsungleichheiten ungerecht?

RESEARCH

Open Access

Are health care inequalities unfair? A study on public attitudes in 23 countries



Olaf von dem Knesebeck*, Nico Vonneilich and Tae Jun Kim

Abstract

Background: In this article we focus on the following aims: (1) to analyze national and welfare state variations in the public perception of income-related health care inequalities, (2) to analyze associations of sociodemographic, socioeconomic, health-related, and health care factors with the perception of health care inequalities.

Methods: Data were taken from the International Social Survey Programme (ISSP), an annually repeated cross-sectional survey based on nationally representative samples. 23 countries ($N = 37,228$) were included and assigned to six welfare states. Attitude towards income-related health care inequalities was assessed by asking: "Is it fair or unfair that people with higher incomes can afford better health care than people with lower incomes?" with response categories ranging from "very fair" (1) to "very unfair" (5). On the individual level, sociodemographic (gender, age), socioeconomic (income, education) health-related (self-rated health), and health care factors (health insurance coverage, financial barriers to health care) were introduced.

Results: About two-thirds of the respondents in all countries think that it is unfair when people with higher incomes can afford better health care than people with lower incomes. Percentages vary between 42.8 in Taiwan and 84 in Slovenia. In terms of welfare states, this proportion is higher in Conservative, South European, and East European regimes than in East Asian, Liberal, and Social-Democratic regimes. Multilevel logistic regression analyses show that women, people affected by a low socioeconomic status, poor health, insufficient insurance coverage, and foregone care are more likely to perceive income-related health care inequalities as unfair.

Conclusions: In most countries a majority of the population perceives income-related health care inequalities as unfair. Large differences between countries were observed. Welfare regime classification is important for explaining the variation across countries.

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Are health care inequalities unfair? A study on public attitudes in 23 countries



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Background: In this article we focus on the following aims: (1) to analyze national and welfare state variations in health care inequalities, (2) to analyze public attitudes towards health care inequalities, and (3) to analyze the influence of socio-economic factors on public attitudes towards health care inequalities. **Results:** About two-thirds of the respondents in all countries think that it is unfair when people with higher incomes can afford better health care than people with lower incomes. Percentages vary between 42.8 in Taiwan and 84 in Slovenia. In terms of welfare states, this proportion is higher in Conservative, South European, and East European regimes than in East Asian, Liberal, and Social-Democratic regimes. Multilevel logistic regression analyses show that women, people affected by a low socioeconomic status, poor health, insufficient insurance coverage, and foregone care are more likely to perceive income-related health care inequalities as unfair.

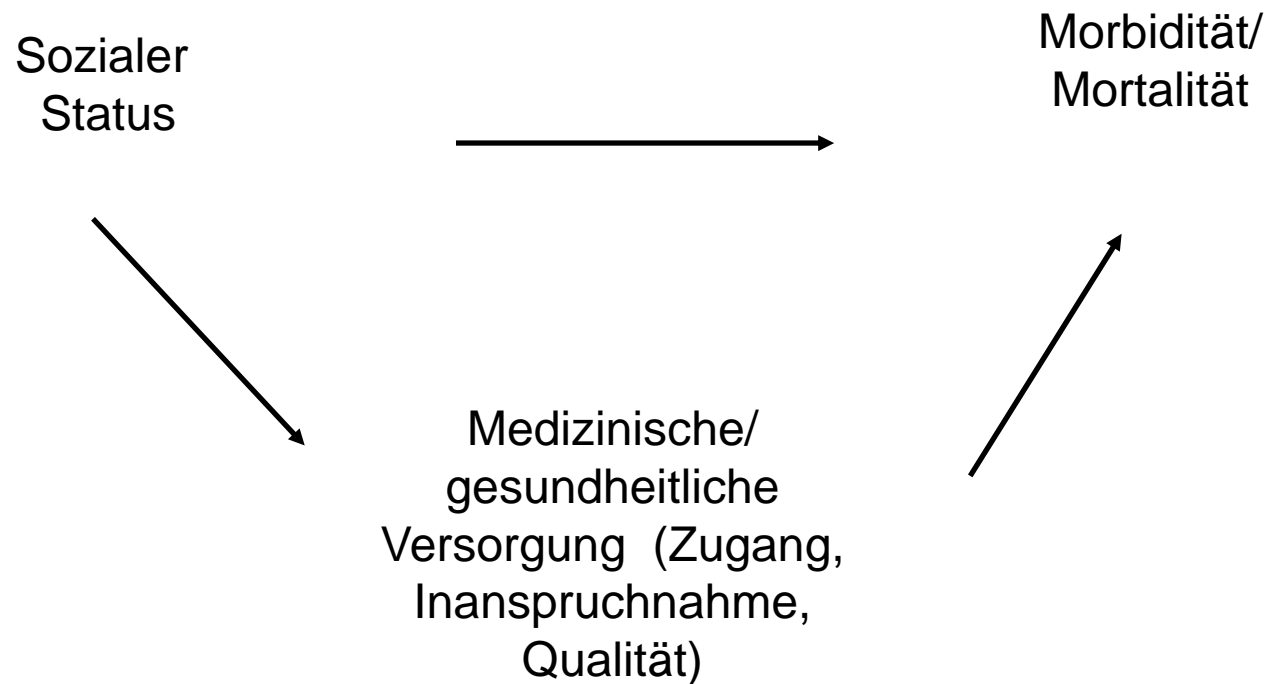
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Erklärung gesundheitlicher Ungleichheit durch medizinische/gesundheitliche Versorgung



Wie kann man den Erklärungsbeitrag der medizinischen Versorgung (umfassend) quantifizieren?

Der „amenable mortality-Ansatz“

Analyse von Mortalitätsunterschieden bei Todesursachen, die im Einflussbereich medizinischer Interventionen liegen (“mortality amenable to medical care”, z.B. Tuberkulose, andere Infektionskrankheiten, Leukämie).

Dabei hat sich gezeigt, dass in Europa etwa 5% der Bildungsunterschiede in der Mortalität auf Todesursachen zurückzuführen sind, die medizinischen Interventionen zugänglich sind (Mackenbach et al. 2008). Eine Nachfolgestudie ergab 11 bis 24% (Stirbu et al. 2010).

Spiegeln Ungleichheiten bei solchen Todesursachen den Beitrag von Versorgungsungleichheiten wider?

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	Education	0.15**	0.06 to 0.23	0.14**	0.06 to 0.23	0.13**	0.04 to 0.22	0.15**	0.07 to 0.24	0.13**	0.04 to 0.22
	Occupation	0.16***	0.08 to 0.24	0.16***	0.08 to 0.23	0.12**	0.04 to 0.21	0.15***	0.07 to 0.23	0.12**	0.04 to 0.21

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†Values in bold are significant (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, Wald- χ^2 test).

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Zusammenfassung

- Versorgungsungleichheiten tragen zur Erklärung von gesundheitlichen Ungleichheiten bei.
- Verallgemeinerbare Aussagen zum Umfang des Erklärungsbeitrags sind aber kaum möglich. Wie bei anderen Erklärungsfaktoren variiert der Beitrag u.a. mit der Erkrankung.
- Untersuchung/Quantifizierung des Erklärungsbeitrags wirft (bislang nicht gelöste) methodische Fragen auf.

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- Konzepte der Soziologie/Sozialepidemiologie sollten verstärkt Eingang in die VF finden.
- Dies ist eine Chance für die Med. Soziologie.
- Forschungsdefizite bestehen insbesondere:
 - bei Studien zur Prozessqualität: z.B. Soziale Ungleichheit in der Arzt-Patienten-Interaktion (geeignete Untersuchungsdesigns? Antrag Innovationsfonds)
 - bei Studien zur Einordnung/Bewertung von Versorgungsungleichheiten (s.o. Gesundheitsrelevanz (Inanspruchnahme, Zugang), Bezug zur Versorgung (Ergebnisqualität))
 - bei Studien zur Erklärung gesundheitlicher Ungleichheiten durch die Versorgung
 - im Anwendungsbereich: Welche Interventionen tragen zu einer Verringerung von Versorgungsungleichheiten bei?