Financial burden and work productivity assessment of CKD on patients: Results from an international survey

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KEY FINDINGS

Patients with kidney failure who require dialysis experience **more severe work impairment**

Chronic kidney disease (CKD) can exert a **considerable influence** upon patients' daily lives, often requiring **hospital visits**, affecting their **ability to work**

This effect worsens with advanced disease, leading to **financial strain**

CONCLUSION

These surveys indicate that patients experience **impairment to work productivity** in both early and advanced stages of CKD

The financial burden of CKD extends beyond the formidable cost of medical care, with potentially **significant loss** of productivity at the population level

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Introduction

- CKD is known to negatively affect a patient's ability to work.[1]
- The work productivity and financial burden of patients with CKD are poorly understood.

Objective

To quantify the impact of CKD on patients' financial status and work productivity across five countries.

Methods

- Patients with CKD in the US, UK, Mexico, Germany and Taiwan were enrolled in a survey assessing:
- Financial wellbeing via the Consumer Financial Protection Bureau (CFPB) instrument
- Financial toxicity via FACIT-COST score
- Work productivity and activity impairment (WPAI)
- Scores were compared with a general population cohort, matched for demographic characteristics and sample size

Results

Demographic characteristics

Table 1. Patients with CKD demographic characteristics

Enrolment (N)	201	204	212	199	190
Dialysis status (%)	42%	57%	54%	32%	15%
Dialysis location (%)	Home: 2.5–16.2				
	Clinic/hospital: 11.1–49.5				
Dialysis type (%)	Peritoneal: 4.2–20.1				
	Haemodialysis: 11.1–40.1				

Ranges of patients across all five countries.

CKD results in work changes for patients

Table 2. Patients with CKD in Mexico have the highest rate of unemployment due to medical reasons

12.4%	19.1%	13.7%	17.6%	2.1%

Table 3. Patients with CKD experience work changes across all countries

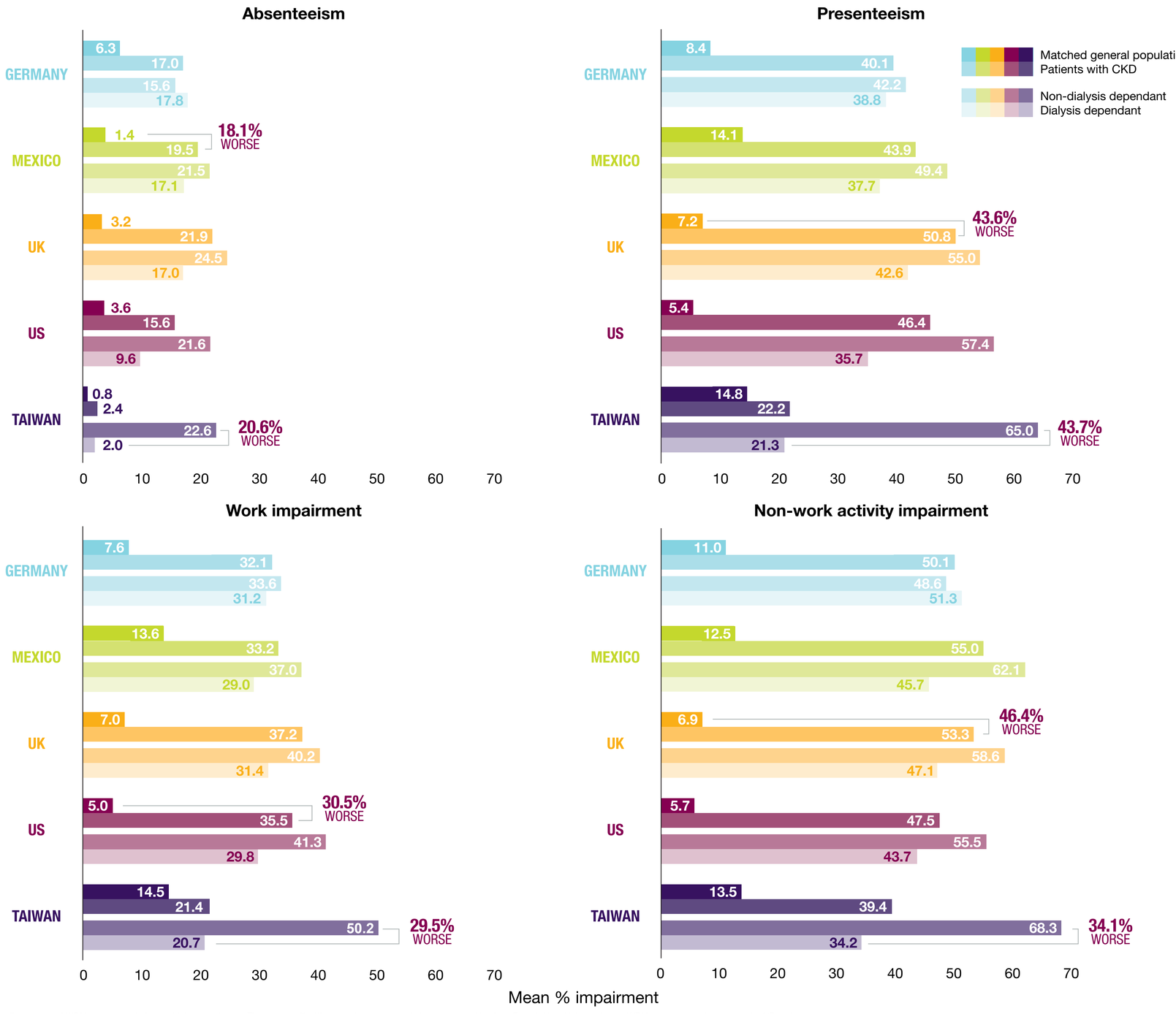
	GERMANY		MEXICO		UK		US		TAIWAN	
	DD	NDD	DD	NDD	DD	NDD	DD	NDD	DD	NDD
Reduced hours of working (%)	24.7	20.7	34.5	25.0	49.1	20.4	34.4	4.4	20.7	9.9
Moved from full time to part time (%)	10.6	11.2	6.9	4.6	22.8	10.2	18.8	3.7	6.9	2.5
Moved to a less demanding job (%)	7.1	7.8	10.3	10.2	21.1	10.2	9.4	5.2	17.2	11.8
Retired early (%)	22.4	5.2	4.3	9.1	5.3	10.2	10.9	17.0	3.5	0.6

DD, dialysis dependent; NDD, non-dialysis dependent

Results (continued)

Responses to WPAI questionnaires show those with CKD report worse productivity versus the matched general population, with substantively worse outcomes in those receiving dialysis.

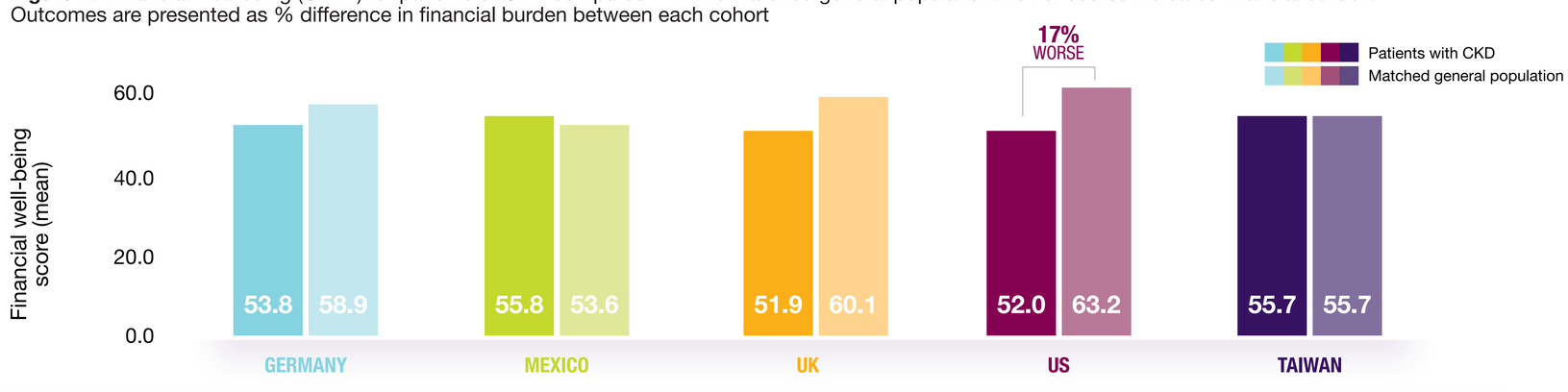
Figure 1. WPAI in patients with CKD versus matched general population, and dialysis dependent versus non dialysis dependent patient cohorts. Outcomes are presented as the greatest % time lost due to absenteeism, presenteeism, work impairment and non-work activity impairment between populations



Higher rates of WPAI parameters indicates higher impairment. The greatest % differences between populations are stated in plum. For additional information on WPAI parameters, please scan the QR code

Patients with CKD experience financial strain, with financial well-being scores worse by up to 17%

Figure 2. Financial well-being (CFPB) for patients of CKD compared with the matched general population. Lower scores indicates financial burden. Outcomes are presented as % difference in financial burden between each cohort



Supported by AstraZeneca

Acknowledgements

This research was supported by AstraZeneca. Medical writing support was provided by Aisling Morrin, PhD and Chloe Hembury, BSc of Health Economics and Outcomes Research Limited.

References

1. Alma, MA, van der Mei, SF, Brouwer, S, et al. Sustained employment, work disability and work functioning in CKD patients: a cross-sectional survey study. J Nephrol. 2023;36,731–743