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## **Disparities in atrial fibrillation**

*a call for holistic care*

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*Published in:*  
The Lancet Regional Health - Europe

*DOI (link to publication from Publisher):*  
[10.1016/j.lanepe.2021.100160](https://doi.org/10.1016/j.lanepe.2021.100160)

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*Publication date:*  
2021

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*  
Kotalczyk, A., & Lip, G. Y. H. (2021). Disparities in atrial fibrillation: a call for holistic care. *The Lancet Regional Health - Europe*, 7, [100160]. <https://doi.org/10.1016/j.lanepe.2021.100160>

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# The Lancet Regional Health - Europe

journal homepage: [www.elsevier.com/lanepe](http://www.elsevier.com/lanepe)

## Commentary

## Disparities in atrial fibrillation: a call for holistic care

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### ARTICLE INFO

#### Article History:

Received 1 June 2021

Accepted 1 June 2021

Available online 6 July 2021

Atrial fibrillation (AF) is the most common sustained arrhythmia affecting 17.9 million people in Europe by 2060 [1]. AF confers an increased risk of mortality and morbidity, with major public health and economic consequences, particularly due to hospitalisations [2].

In this issue of *The Lancet Regional Health – Europe*, Chung and colleagues [3] provide population-based evidence on the epidemiology, disparity and healthcare contacts of patients with AF in the United Kingdom. They evaluated AF incidence, comorbidities, healthcare utilisation and mortality in AF patients using electronic health records of 5.6 million in the United Kingdom from 1998 to 2016. Chung and colleagues [3] report several key findings. The repeated hospitalisations for ischemic heart disease and heart failure may be a sign of ongoing undiagnosed AF, and individuals from areas with the highest deprivation in socioeconomic status had a 12% greater risk of developing AF and a 26% higher AF-related mortality than those living in the wealthiest areas. A fifth of patients died within the first year of AF diagnosis, and the mortality doubled within five years after diagnosis. Excess deaths among AF patients were mainly due to cardiovascular causes, gastrointestinal and metabolic disorders or infection compared to non-AF patients. Furthermore, approximately three in five AF patients had  $\geq 2$  comorbidities at the time of diagnosis.

These results reaffirm the high morbidity and mortality rates among AF patients as well as disparities in AF care in the United Kingdom. Such disparities could be avoided by providing a simple approach to integrated or holistic AF care that is applicable whether the patient is managed in primary care (where most AF patients are managed) or in secondary care (by non-cardiologists and cardiologists). AF is often asymptomatic, and its first diagnosis may be when the patient presents with an AF-related complication, such as stroke or heart failure. Early AF detection and in-depth characterisation of AF patients is needed when such patients undergo clinical evaluation [4].

For the United Kingdom, which is the setting of this study, approximately 1.4 million people are at risk of strokes due to AF. Indeed, AF is predicted to directly cost the NHS between 0.9% and 1.6% of NHS expenditure (a total of £1435 m - £2548 m), with costs principally due to primary admissions. Over the next two decades, the total AF costs would increase to 1.35–4.27% of NHS expenditure, with health and social care expenditure being £46,039 per patient in the five years after stroke [5]. If the number of AF-related hospitalisations can be reduced, it would substantially reduce healthcare costs [2]. Of note, AF patients with multiple comorbidities, including those with concomitant cardiovascular diseases (heart failure, coronary artery disease), diabetes mellitus, chronic obstructive pulmonary disease and renal dysfunction are at particularly increased risk of hospitalisations.

Analysis of the factors contributing to the AF incidence and mortality are crucial in understanding the reasons for increased healthcare utilisation and costs. Despite evidence confirming that guideline-adherent therapies are associated with improved outcomes for AF patients, there remains significant geographical discrepancy in the quality of care [6].

How can we deal with multimorbidities and health inequalities related to AF management? The principles of integrated or holistic AF management can be summed up as in the ABC (Atrial fibrillation Better Care) pathway: ‘A’ Avoid stroke (with Anticoagulants); ‘B’ Better symptom management; ‘C’ Cardiovascular and Comorbidity management [7]. In a recent systematic review, AF patients treated according to the ABC pathway showed a lower risk of all-cause death (OR:0.42, 95%CI 0.31-0.56), cardiovascular death (OR:0.37, 95%CI 0.23-0.58), stroke (OR:0.55, 95%CI 0.37-0.82) and major bleeding (OR:0.69, 95%CI 0.51-0.94) [8]. Improved clinical outcomes with ABC pathway compliance are evident, even in clinical complex patients such as those with multimorbidity, polypharmacy and hospitalisations [9]. Importantly, such a streamlined approach can be applicable to whether the patient is managed by any healthcare professional, whether the general practitioner or the hospital-based specialist (whether cardiologist or non-cardiologist), as promoted in patient pathways to improve diagnosis and management of AF patients (<https://bit.ly/2FhrwXQ>; accessed 31 May 2021). This would facilitate discussion and patient engagement on the principles of AF care (‘easy as ABC...’) and avoids conflicting information from healthcare professionals that has been associated with poorer patient adherence with their management plan [10].

DOI of original article: <http://dx.doi.org/10.1016/j.lanep.2021.100157>.

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<https://doi.org/10.1016/j.lanep.2021.100160>

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## Contributors

AK and GYHL contributed equally to the first draft of the paper and critical revisions.

## Disclosures

AK: None declared. GYHL: Consultant and speaker for BMS/Pfizer, Boehringer Ingelheim and Daiichi-Sankyo. No fees are received personally.

## Acknowledgments

None.

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