

P4607 | BEDSIDE**How patient advocacy in partnership with community pharmacy can identify people at risk of AF in community pharmacy setting**

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Background: Opportunistic case-finding is recommended as a means to identify the one-third of people with undiagnosed AF. Recent studies have demonstrated the benefit of engaging community pharmacists to 'screen' for these patients. Know Your Pulse is a proprietary initiative of the UK's leading heart rhythm charity that facilitates manual pulse rhythm checks for the general public and connects those found to have an irregular rhythm with their primary care practitioner. Global AF Awareness Week is run on an annual basis during which a 'Know Your Pulse campaign' is held in multiple settings where the general public can receive a free manual pulse rhythm check. Settings have included GP surgeries, Hospital reception areas, Community Pharmacy and public places with a high footfall of the general public, such as railway stations and shopping malls.

In 2016, this initiative involved partnership between patient advocacy and an international pharmacists group. AF Aware Week took place 21–27 November 2016.

Aims: Raise awareness of AF and importance of pulse rhythm checks to general public across multiple countries

Assess feasibility of implementing pulse checks in community pharmacy

Methods: Five countries of an international pharmacy taskforce were engaged, with Community Pharmacy partners identified to deliver the campaign. Educational and campaign materials were provided, in local language, by the Heart Rhythm Charity, including a training tool to teach pharmacists how to run pulse checks, a template for recording results and a patient referral process.

Results: 1699 pulse checks were undertaken in 56 pharmacies across 5 countries.

77 people had an irregular heart rhythm detected and were referred to their clinical practitioner.

Outcomes: see table

Preliminary results of pulse checks

Country	Number of pharmacies	Pulses checked	People referred
Canada	4	219	20
New Zealand	4	58	1
Portugal	24	850	34
Spain	23	390	14
UK	1	182	8
TOTAL	56	1699	77 (4.5%)

This preliminary collaboration project demonstrated that Community Pharmacists can deliver pulse rhythm checks to the general public to help identify people at risk of AF. The collaboration plans to expand the project during Heart Rhythm Week (5–9 June 2017) to more community pharmacists in more countries with a target to deliver pulse rhythm checks to 10,000 people.

P4608 | BEDSIDE**Benefits of active involvement of community pharmacists in know your pulse awareness campaign**

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Background: Atrial fibrillation is the most common cardiac arrhythmia globally, responsible for one third of strokes, and often resulting in death or incapacity. This condition, frequently asymptomatic, is estimated to be up to 50% undiagnosed. Reducing this risk with appropriate detection and management strategies offers substantial economic and patient benefits. The International Pharmacist for Anticoagulation Care Taskforce- [iPACT] created a partnership with the Atrial Fibrillation Association (AFA) to test a model whereby pharmacists are actively involved in opportunistic screening for AF initially in all ages as a proof of concept.

Purpose: To assess the feasibility of pharmacists implementing pulse checks in community pharmacy to enable identification of new cases of AF and subsequent initiation of anticoagulation.

Methods: This initiative was tested in 5 iPACT member countries during global AF aware week (21–27th November 2016): Canada, New Zealand, Portugal, Spain, and UK. Materials (posters and leaflets) and training on pathophysiology of AF and demonstration of pulse taking was presented to all centres prior to taking part in the campaign. Any person walking into a community pharmacy over 18 years of age was offered a free pulse check. For any irregularity detected, individualised counselling was offered with a referral made to local family physician and recommendation that if AF was confirmed, anticoagulation should be offered in accordance with international guidelines. Written patient consent was obtained with ethics approval sought in countries requiring it.

Results: 1717 people were recruited from 56 pharmacies with an average age of 62.2±15.5 years; median of 63 years, 793 (46.2%) were 65 years or older; and 1037 (60.4%) being female. Individual country recruitment ranged from 58 to 868 with the average community pharmacy recruiting 30 people. 77 (4.5%) people were referred following an irregular pulse of which 24 (1.4%) had confirmed diagnosis within 30 day follow up with 10 (0.6%) unconfirmed, all of whom received anticoagulation in accordance with guideline recommendations.

Conclusion: ESC guidance recommends opportunistic screening for AF by pulse taking or ECG rhythm strip in patients >65 years of age and this was the largest multi-country "Know Your Pulse" campaign since the creation of the concept by AFA in 2008. Our data albeit with a slightly lower age is synonymous with meta-analyses identifying 1.4% of those aged 65 or older on a single time point check for presence of AF. Community pharmacies are ideally located to support awareness campaigns and in the case of atrial fibrillation, early detection. Asymptomatic AF is common, unfortunately, pulse taking is not commonly performed in general practice, and so an irregular pulse will go undetected. If every pharmacy worldwide screened 100 people, pharmacists could make a major contribution to addressing undiagnosed AF.

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P4609 | BEDSIDE**lipid profile and incidence of atrial fibrillation: results from the Kailuan Study**

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Background: Atrial fibrillation (AF) and atherosclerosis cardiovascular diseases (ASCVD) share common risk factors. Dyslipidemia as a major contributor to ASCVD reveals a controversial relationship with atrial fibrillation due to limited evidence.

Purpose: To investigate the association between lipid profile and incident AF in general population.

Methods: A total of 57,592 participants who were free from AF at baseline (2006–2007) were derived from the Kailuan Study. Fasting total cholesterol, low-density lipoprotein cholesterol (LDL-c), high-density lipoprotein cholesterol (HDL-c), and triglycerides were measured at baseline using standard procedures. Incident AF was ascertained by electrocardiograms of biennial follow-up visits (2008–2015). The associations between incident AF and blood lipids were observed by Cox proportional hazards regression models.

Results: During a mean follow-up of 8.36 years, 328 (0.57%) subjects developed AF. Higher (per SD increment) total cholesterol (HR: 0.89; 95% CI: 0.80 to 0.99) and LDL-c (HR: 0.82; 95% CI: 0.73 to 0.92) levels were inversely associated with incident AF after multivariable adjustment, especially in male gender. Neither HDL-c nor triglycerides were related to newly-developed AF. As for lipid ratios, total cholesterol/HDL-c and LDL-c/HDL-c were both inversely associated with the risk of AF (per unit increment, HR: 0.88; 95% CI: 0.79 to 0.98 and HR: 0.77; 95% CI: 0.66 to 0.91 respectively). The results remained consistent after excluding individuals with cardiovascular diseases and lipid-lowering medication.

Blood lipids and risk of AF

	Model 1		Model 2	
	HR (95% CI)	P value	HR (95% CI)	P value
TC (per SD increment)	0.90 (0.81–1.00)	0.061	0.89 (0.80–0.99)	0.033
LDL-c (per SD increment)	0.85 (0.76–0.94)	0.002	0.82 (0.73–0.92)	0.001
HDL-c (per SD increment)	0.99 (0.89–1.09)	0.773	1.04 (0.94–1.15)	0.479
TG (per SD increment)	1.04 (0.93–1.16)	0.481	0.93 (0.82–1.06)	0.298
TC/LDL-c (per unit increment)	1.00 (0.99–1.01)	0.790	1.00 (0.99–1.02)	0.810
TC/HDL-c (per unit increment)	0.93 (0.84–1.03)	0.149	0.88 (0.79–0.98)	0.022
LDL-c/HDL-c (per unit increment)	0.82 (0.71–0.95)	0.009	0.77 (0.66–0.91)	0.002
TG/HDL-c (per unit increment)	1.00 (0.98–1.02)	0.808	0.97 (0.92–1.02)	0.247

Model 1: demographic adjusted. Model 2: multivariable adjusted.

Conclusion: Total cholesterol and LDL-c levels were inversely associated with incident AF, especially in male gender, whereas the relationship between AF and HDL-c or triglycerides levels was insignificant.

P4610 | BEDSIDE**Prevalence rates of atrial fibrillation tentatively increased during and after the Great East Japan earthquake**

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Background: To what extent prevalence rates of atrial fibrillation (AF) changed after the Great East Japan Earthquake 2011 has not been sufficiently elucidated.

Methods: Community dwellers aged 40 to 74 years living in Iwate Prefecture who underwent annual health checkups (2010 (n=174,940), 2011 (n=174,236), 2012 (n=183,612), 2013 (n=188,429), account for approximately 30% of total population) were enrolled. Participants were divided into three age categories. Direct age-adjusted prevalence rate of AF in each year was estimated using the 2010 population as the reference.