

Supplementary material

A clinical care pathway to detect advanced liver disease in patients with type 2 diabetes through automated fibrosis score calculation and electronic reminder messages: A randomised controlled trial

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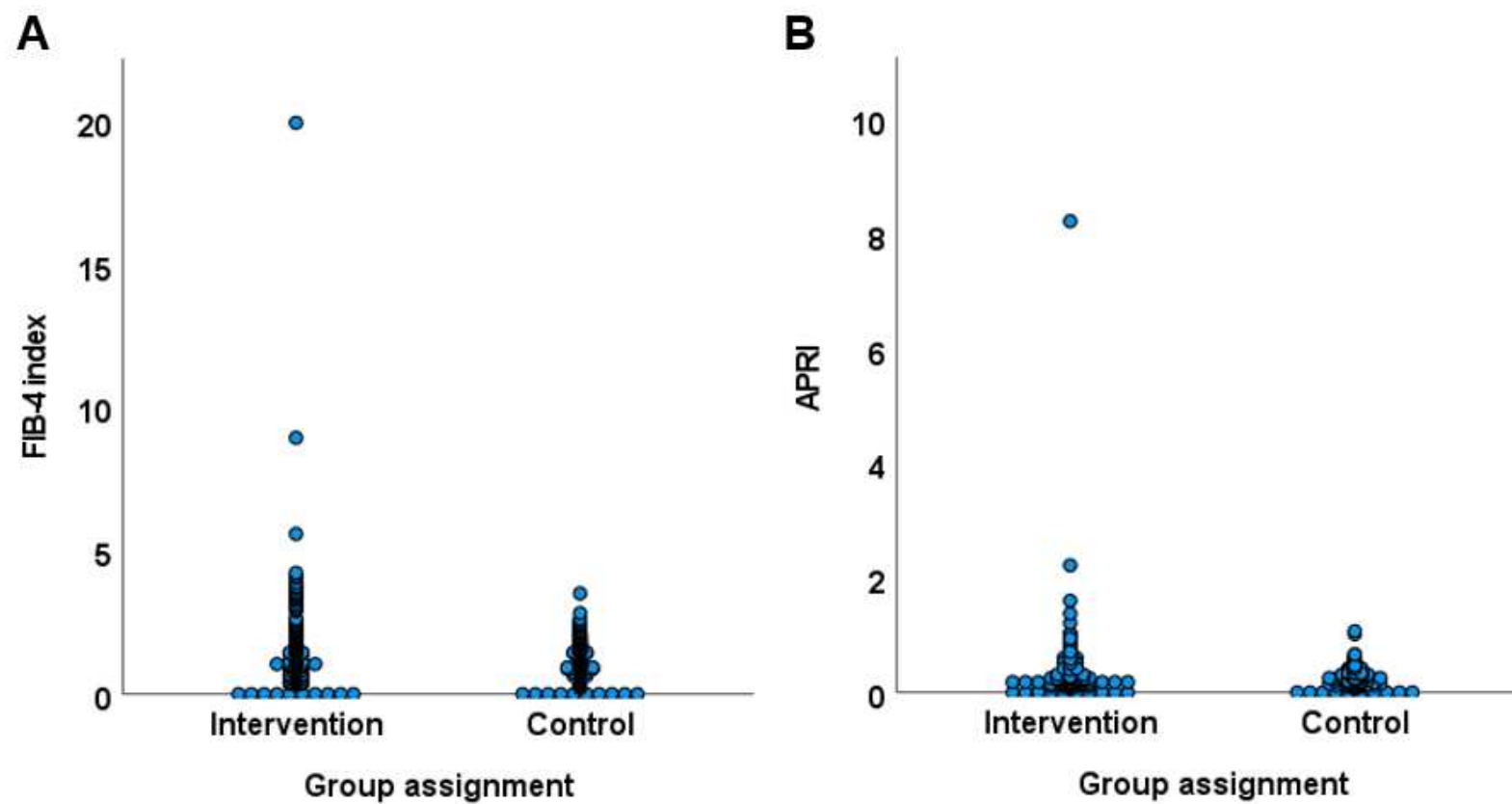
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Supplementary Figure 1: Distribution of (A) Fibrosis-4 index (FIB-4) and (B) aspartate aminotransferase-to-platelet ratio index (APRI) in the intervention and control groups



Supplementary Table 1: Changes in FIB-4 at a median interval of 1 year in a separate cohort of 8700 patients with NAFLD

Baseline FIB-4	<1.3	1.3-2.66	≥2.67
Follow-up FIB-4			
<1.3	4230	740	32
1.3-2.66	608	1912	297
≥2.67	56	319	506

Supplementary Table 2: Factors associated with hepatology referral or further fibrosis assessment in the intervention group

Factors	Univariate analysis			Multivariable analysis		
	Odds ratio	95% CI	p value	Odds ratio	95% CI	p value
Age, years	1.012	0.977-1.048	0.52			
Female sex	1.143	0.659-1.980	0.63			
Hong Kong (vs Malaysia)	4.195	0.998-17.627	0.050	2.020	0.406-10.046	0.39
Diabetes clinic (vs general medical clinic)	1.222	0.686-2.177	0.50			
Current smoker (vs ex-smoker and non-smoker)	0.523	0.183-1.498	0.23			
Current drinker (vs ex-drinker and non-drinker)	2.309	1.243-4.289	0.008	1.768	0.853-3.665	0.13
Body mass index, kg/m ²	0.974	0.917-1.034	0.39			
Waist circumference, cm	0.989	0.965-1.012	0.34			
Laboratory parameters						
Creatinine, µmol/L	1.003	0.998-1.007	0.26			
Estimated glomerular filtration rate, mL/min per 1.73 m ²	0.992	0.981-1.003	0.15			
Albumin, g/L	1.016	0.948-1.088	0.66			
Bilirubin, µmol/L	0.982	0.930-1.037	0.51			
Alanine aminotransferase, U/L	1.020	1.008-1.033	0.001			
Aspartate aminotransferase, U/L	1.046	1.027-1.065	<0.001			
Gamma-glutamyl transpeptidase, U/L	1.001	0.999-1.002	0.48			
Fasting plasma glucose, mmol/L	1.013	0.901-1.139	0.83			
Haemoglobin A _{1c} , %	0.928	0.744-1.159	0.51			
Total cholesterol, mmol/L	0.992	0.721-1.365	0.96			
HDL-cholesterol, mmol/L	1.007	0.455-2.228	0.99			
LDL-cholesterol, mmol/L	0.850	0.575-1.257	0.42			
Triglycerides, mmol/L	1.137	0.919-1.406	0.24			
Platelet count, ×10 ⁹ /L	0.985	0.980-0.990	<0.001	1.000	0.994-1.007	0.96
Positive hepatitis B surface antigen	1.204	0.348-4.169	0.77			

Abnormal fibrosis-4 index or aspartate aminotransferase-to-platelet ratio index	91.500	21.965-381.161	<0.001	84.333	18.728-379.745	<0.001
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HDL = high-density lipoprotein; LDL = low-density lipoprotein.

Supplementary Table 3: Factors associated with hepatology referral or further fibrosis assessment for patients with abnormal fibrosis-4 index or aspartate aminotransferase-to-platelet ratio index in the intervention group

Factors	Univariate analysis			Multivariable analysis		
	Odds ratio	95% CI	p value	Odds ratio	95% CI	p value
Age, years	0.991	0.940-1.044	0.73			
Female sex	1.843	0.950-3.574	0.070	2.597	1.125-5.997	0.025
Current smoker (vs ex-smoker and non-smoker)	0.585	0.181-1.887	0.37			
Current drinker (vs ex-drinker and non-drinker)	1.896	0.901-3.989	0.092	3.633	1.449-9.109	0.006
Hong Kong (vs Malaysia)	4.235	0.516-34.755	0.18			
Diabetes clinic (vs general medical clinic)	2.1898	1.041-4.602	0.039	2.484	1.070-5.763	0.034
Body mass index, kg/m ²	0.962	0.899-1.030	0.27			
Waist circumference, cm	0.985	0.960-1.011	0.26			
Laboratory parameters						
Creatinine, µmol/L	1.000	0.993-1.007	0.98			
Estimated glomerular filtration rate, mL/min per 1.73 m ²	0.992	0.977-1.006	0.27			
Albumin, g/L	1.017	0.926-1.117	0.72			
Bilirubin, µmol/L	0.912	0.846-0.984	0.018	0.925	0.852-1.003	0.059
Alanine aminotransferase, U/L	1.005	0.995-1.016	0.34			
Aspartate aminotransferase, U/L	1.009	0.993-1.025	0.28			
Gamma-glutamyl transpeptidase, U/L	0.999	0.997-1.002	0.67			
Fasting plasma glucose, mmol/L	1.054	0.921-1.206	0.44			
Haemoglobin A _{1c} , %	1.126	0.846-1.500	0.42			
Total cholesterol, mmol/L	1.154	0.804-1.657	0.44			
HDL-cholesterol, mmol/L	0.784	0.334-1.838	0.58			
LDL-cholesterol, mmol/L	0.960	0.619-1.491	0.86			
Triglycerides, mmol/L	1.866	1.211-2.875	0.005	2.116	1.314-3.406	0.002
Platelet count, ×10 ⁹ /L	1.001	0.994-1.007	0.83			

Positive hepatitis B surface antigen	0.654	0.128-3.352	0.61			
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HDL = high-density lipoprotein; LDL = low-density lipoprotein.