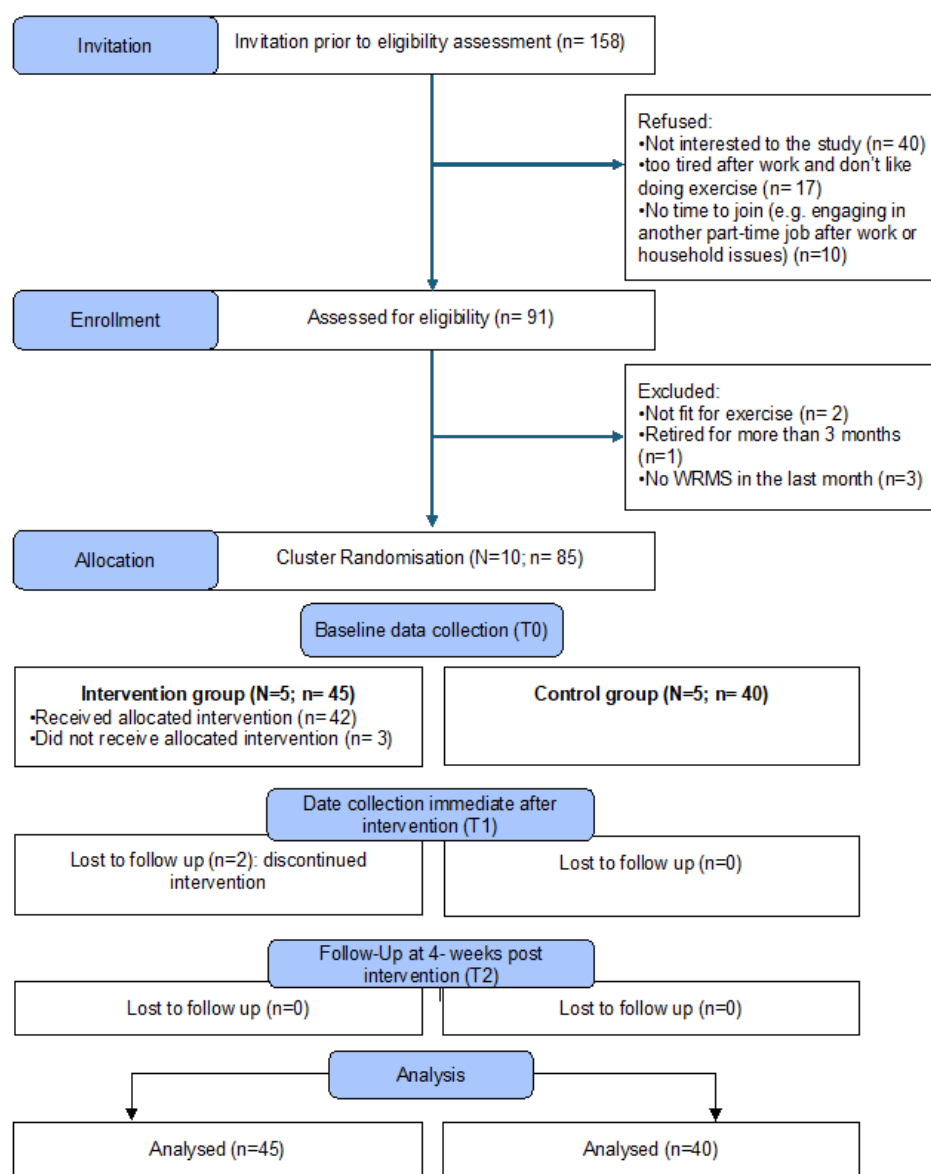


Results:

Figure 1 Study Recruitment and Participant Flow presented with CONSORT Diagram



Note. N= number of clusters; n= number of participants

Table 1 Descriptive Statistic Summary of the Participants' Demographics and Working Conditions

(A) Demographic situation of the participants:

	Intervention (n= 45)	Control (n=40)
Age		
Median (IQR)	61.00(11.00)	61.50(18.00)
Age range		
Number of participants, n (%)		

31-40	2(4.44%)	3(7.50%)
41-50	6(13.33%)	10(25.00%)
51-60	13(28.89%)	7(17.50%)
61 or above	24(53.34%)	20 (50.00%)
Gender		
Female	40(88.89%)	31(77.5%)
Male	5(11.11%)	9(22.5%)
Marital status		
Single	0(0.00%)	1(2.50%)
Married	32(71.11%)	32(80.00%)
Widow	10(22.22%)	4(10.00%)
Divorced or separated	3(6.67%)	3(7.50%)
Education level		
Illiteracy	4(8.89%)	9(22.50%)
Completion of Primary Education	29(64.66%)	24(60.00%)
Completion of Secondary Education	12(26.67%)	7(17.50%)
(B) Participant working conditions:		
Mode of employment		
Employed by contractors	40(88.89%)	37(92.5%)
Employed by private company	5(11.11%)	2(5.00%)
Self-employment	0(0.00%)	1(2.50%)
Working experience, years		
Median (IQR)	5.0(7.5)	5.0(7.0)
Number of participants, n (%)		
< 1 year	1(2.22%)	2(5.00%)
1-5 years	22(48.89%)	18(45.0%)
6-10 years	11(24.44%)	13(32.50%)
11-15 years	3(6.67%)	2(5.00%)
16-20 years	5(11.11%)	2(5.00%)
>20 years	3(6.67%)	3(7.50%)
Weekly working hours		
Median (IQR)	48.0(12.0)	48.0(8.0)

Table 2. Changes of outcome measures within group along timeline

		IG	CG
		Mean (SD)	Mean (SD)
no.WRMS	T0	3.11 (1.86)	3.23 (2.04)
	T1	1.76 (1.25)	3.95 (2.14)

	T2	1.33 (1.22)	4.22 (2.15)
MSK-HQ	T0	37.16 (8.13)	39.62 (9.40)
	T1	41.56 (7.93)	40.95 (9.23)
	T2	42.51 (8.75)	40.38 (7.25)
QoL	T0	3.36 (0.71)	3.50 (0.72)
	T1	3.71 (0.76)	3.60 (0.78)
	T2	3.89 (0.83)	3.73 (0.72)
sWAI	T0	7.04 (1.49)	7.28 (1.71)
	T1	7.71 (1.32)	7.88 (1.49)
	T2	7.93 (1.44)	7.65 (1.39)

All intervention completed uneventfully with no adverse events associated with this study.