

Table II - Synthesis of the evaluation process, intervention, outcomes and main results of studies on PV in postmenopausal women

Author/Year	Population characteristics	Intervention protocols		Methods	Outcomes	Main results
		GE	GC			
Gusi <i>et al.</i> , 2006 [13]	28 women, physically untrained, ± 12 years after menopause. Age: 66.	GVCI = 14 women, mean age 66 ± 6 years. PR = 3x per week, for 8 months. Hz : 12.6, TE : 6X1 min, PC : 60° Knee flexion.	CG + AL = 14 women, mean age 66 ± 4 years. PR = 3x per week for 8 months. 55 min of walking and 5 of stretching.	Dual-energy x-ray absorptiometry	DMO	After 8 months, the DMO in the femoral neck in the GVCI was increased by 4.3% ($P = 0.011$) compared to the GC+AL.
Beck <i>et al.</i> , 2010 [14]	47 women, 5 years after menopause. Age: 71.5 ± 9 years. *	GVCIBI = 13 women, mean age 68.5 ± 8 . PR = 2x per week for 8 months. HZ : 30 (0.106 m/s), TE : 15 min, PC : Total knee extension. / GVCIAI = 15 women, mean age 68.9 ± 7 . PR = 2x per week for 8 months. Hz : 12.5 (0.5 m/s), TE : 2 x 3 min, PC : Flexed knee.	GC = 14 women, mean age 74.2 ± 8 . PR = Continue AVDs and abstain from VCI for a period of 8 months prior to accompaniment.	Calcaneus ultrasound	DMO	Maintenance of DMO of the femur and spine bones. GC there was no maintenance.
Slatkovska <i>et al.</i> , 2011 [15]	202 women, more than 1 year after menopause. Age: 59 - 60 years.	GVCI-90 Hz = 67 women, mean age 60.5 ± 7 . PR = 7 days a week for 12 months. Hz = 90 (0.3g), TE = 20 min per day, CP = Upright, with neutral posture in the neck, lumbar spine and knees / GVCI-30 Hz = 68 women, mean age 59.6 ± 6 . PR = 7 days a week for 12 months. Hz = 30 (0.3g), TE = 20 min per day, CP = Upright, with neutral posture in neck, lumbar spine and knees.	GC = 67 women, mean age 60.8 ± 5 . PR = 12 months of follow-up. Did not use a VCI.	Dual-energy x-ray absorptiometry;	DMO	12 months of low-magnitude VCI (0.3 g) at 90 or 30 Hz had no effect on DMO or bone structure in healthy postmenopausal women.
Stengel <i>et al.</i> , 2011[16]	108 women. Average age 65.8 ± 3 years.	GVCIR = 36 women, mean age 67.9 ± 3 years. PR = 3x week for 12 months. HZ = 12.5 (12mm), TE = 15 min, PC = 1) static squat, 2) dynamic squat; 3) leg abduction; 4) single leg squat; 5) single leg squat including hip flexion on the contralateral side, 6) repetition of exercise 1 and 7) repetition of exercise 2. / GVCIV = 36 women, mean age 68.1 ± 4 years. PR = 3x week for 12 months. Hz = 35 (1.7mm), TE = 15 min, PC = (equal to GVCIR).	GC = 36 women, mean age 67.6 ± 4 . PR = Blocks of 10 sessions of low intensity gymnastics.	Dual-energy x-ray absorptiometry	DMO	Both GI showed gains in cervical and lumbar spine DMO when compared to the GC.

Lai <i>et al.</i> , 2013 [17]	28 women, ± 9.8 years after menopause. Average age: 60.1 ± 7.1 years	GVCi = 14 women, mean age 60.1 ± 7.1. PR = 3x per week for 6 months. H_z = 30 (3.2g) TE = 5 min, PC = Orthostasis.	GC = 14 women, mean age 62.4 ± 7.1. PR = Maintain daily life habits and do not use any medication for osteoporosis, including calcium and vitamin D.	Dual-energy x-ray absorptiometry	DMO	6 months of high frequency and high magnitude VCI increased lumbar spine DMO when compared to GC.
Cascales <i>et al.</i> , 2019 [18]	38 women. Average age: 59.8 ± 6 years.	GVCi = 14 women, mean age 60.1 ± 5 years. PR = 3x per week for 12 weeks. H_z = 35 (4mm); TE = 5 - 8x of 45 - 60s (5-8 min), PC = half squat (knee and hip angle 120°) and ankle plantar and dorsal flexion / GMC = 14 women, mean age 57.7 ± 7 years. PR = Progressive vertical jumps; walk 35-45 min at 50-60% FCR.	GC = 10 women, mean age 59.8 ± 6 years. PR = No intervention.	Dual-energy x-ray absorptiometry	DMO	Maintenance of the DMO.
Sen <i>et al.</i> , 2020 [19]	58 women. Age 40-60 years.*	GVCi = 15 women, mean age 55 ± 4 years. PR = 3 days a week for 24 weeks. H_z = 30-40 (2-4mm), TE = 20-60 min, PC = squat, deep squat, step squat, lunge and front lunge with hands. / GEAI = 16 women, mean age 53.1 ± 4. PR = 10-60 jumps per session for 12 weeks.	GC = 18 women, 54.5 ± 6 years. PR = No intervention.	Dual-energy x-ray absorptiometry	DMO	Increased DMO in the femoral neck and lumbar regions in the GVCi compared to the GC. In GEAI there was no significant effect.

GE = Experimental group; **GC** = Control Group; **GVCi** = Full Body Vibration Group; **GC+AL** = Control Group plus Stretching; **PR** = Intervention Protocol; **H_z** = hertz **TE** = Exposure Time; **PC** = Body Position; **DMO** = Bone Mineral Density; * = Sample loss; **GVCIBI** = Low Intensity Whole Body Vibration Group; **GVCIAI** = High Intensity Full Body Vibration Group; **GVCi-90 Hz** = Full Body Vibration Group at 90 Hz; **GVCi-30 Hz** = Full Body Vibration Group at 30 Hz; **GVCiR** = Rotational Whole Body Vibration Group; **GVCiV** = Vertical Full Body Vibration Group; **GMC** = Multi Component Group; **GEAI** = High Impact Exercises Group