

PS2.310

Systematic review evaluating influence and efficiency of Telemedicine on patients' adherence to life-style modifications, disease prevention and management

M Kozlovska(1), Liga Kozlovska(1), S Gintere(2), G Ticmane(1), R Vintere(2), D Misina(1)

(1) The Rural Family Doctors' Association of Latvia, Riga, Latvia

(2) Riga Stradin's University, Department of Family Medicine, Riga, Latvia

Corresponding author: Dr Liga Kozlovska, The Rural Family Doctors' Association of Latvia, Salaspils, Latvia. E-mail: liga_kozlovska@inbox.lv

Background & Aim: The aim was to evaluate available research information about the influence of telemedicine on patients' adherence with various chronic conditions in prevention, treatment and possible efficiency.

Methods: All available research data were gathered in a systematic review from PubMed and Cochrane Databases, publicized in the time period from 2012 to 2015, mostly 2015. Words like 'adherence telemed', 'compliance telemed', 'telemedicine', 'telemedicine treatment', 'telemedicine exercises', 'telemedicine prevention', 'telemedicine effectivity' were entered in the search window of databases, thereafter analyzing „full text” studies and their quality. Research was carried out according to PRISMA guidelines. The data were analyzed by two, independent researchers. No conflicts of interest.

Results: 26 studies about adherence complied with the aim. In the research analyses three cohort studies, three meta-analyses, eight systematic reviews and eleven systematic reviews with statistical meta-analyses were analyzed, whereof, 262 randomized controlled trials and 165 non-randomized controlled trials were evaluated [n=59132]. Data about the number of participants were provided only in 13 studies. Most systematic reviews about telemedicine influence on adherence and health show, that these studies are held with various methods, of low quality, with a lot of biased information, sponsored, of low range, incomplete data about study participants, quality, timing and lacked long term observation. Only five studies of 22 showed duration of Tele-therapy/-rehabilitation/-prevention intervening. Still, 18 studies, including 6 systematic reviews with meta-analyses, show a little, short term improvement in patients' adherence. And 22 studies out of 26 show efficacy of telemedicine, improving patients' state of health on some level.

Conclusions. Most studies show a little, short term efficacy of Telemedicine on adherence and state of health on some level. However, most systematic reviews show that research of Telemedicine is of a large heterogeneity, of low quality, biased, of low range, quality, timing and lack long term observation