

AT Case study 1

S.D is a 45 years old woman diagnosed with **relapsing-remitting multiple sclerosis** (RRMS) since 2017. She is a mother of two adolescents. She lives in a big two floors house. S.D is a housewife who takes care of her children and manages home. She enjoys watching translated Turkish drama on her iPad. S.D was referred to OT assistive technology department due to experiencing fatigue and muscle weakness restricting her from performing her daily life activities independently. Her relapsing episodes are separated by a period of 9 to 10 months.

Prognosis:

- RRMS affect individuals differently. Usually individuals regain their abilities and symptoms go away partly or completely.

OT Evaluation results:

- **Muscle strength** of both sides shoulders, elbows and wrists:
 - Full ROM with accepting minimal resistance (MMT= +3)
- **Hand functions**, grip, and hand manipulation, are functionally adequate with decreased strength.
- Her **lower extremities** are showing full **ROM** with accepting moderate resistance.
- She is able to **transfer** independently with feeling fatigue.
- She is experiencing mild low **vision**
- During her relapsing episode, she experiences **numbness** in her hands

Target outcome:

- To perform her ADLs and IADLs independently with less fatigue.
- To take care of her children and manage her home chores independently with feeling less fatigue.

The occupational therapist suggested a variety of adaptive devices before evaluating the effectiveness and suitability of each device.

1. Cooking AT:

- Kitchen modifications: (For energy conservation)
 - Pull-out shelves
 - Wall oven
 - Countertop broiler
 - Top-loading dish-washer
- Devices:
 - Rocket T knife (For comfortable easy grip and safe cutting)
 - Electric Jar & bottle opener
 - Safe Slice Knife Guard

2. Bathing:

- Digital faucet thermometer (To prevent burning when sensation is affected)
- Lever-handle faucet (For easy manipulation)
- Non-skid mat (For fall prevention)
- Grab bars (For safety)
- Shower Chair (To use when feeling fatigue to prevent falling)
- Long-handled sponge (For energy conservation)

3. Home management:

- Key Turner (For easy key manipulation)
- Height Adjustable ironing board (To iron while sitting for energy conservation)
- Stepstools (To reach high items with less effort)
- Dust mitts (For Easy dusting of objects without the need of strong grip)

4. Mobility:

- Stairs mobility aid (Can be used at relapsing times for fall prevention and energy conservation)

5. Smart technology:

- Smart watch (To organize tasks and set reminders for medications, tracking health records)
- Home smart technology (For controlling home electricity easily and remotely using one device)

6. Driving:

- Wide-angle mirrors (To view mirrors with less head rotation to prevent fatigue and dizziness)
- Seatbelt extender (For easier grasp, pull, and buckle)

7. Vision aids

- Rigid Page Magnifier (For Full sheet magnification, she needs it when teaching her children)
- Automatic night lights around the house (For better vision of everything around)