

A Brief Review of Current Interventions in Elder Abuse and Neglect

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Abstract In terms of mortality, covid 19 pandemic left most dead in the elderly age group of 75 years and above. With such impact on a specific age group, it becomes significant to know the association of such deaths under the prism of widespread elder abuse among the elderly population. The effect of the pandemic on the global economy by laying off employees has just begun. Whether it will increase or decrease elder abuse remains to be seen. Interventions in elder abuse have been undertaken at primary, secondary, tertiary and quaternary levels. They can be targeted to an individual, formal/informal caregiver, hospital staff or to a broader community. Health care workers have been requested to report and/or intervene at any/all levels including their visiting patients. Interventions can be psychoeducational, psychotherapeutic, supportive or service based. The strength of evidence in most of the intervention studies has been not only found to be weak but also lack quality study designs. This brief review presents an insight on the types of elder abuse interventions and the strength and limitations of such interventions. The aim of the review is to broadly configure the idea of elder abuse intervention types and methods that have been scrutinized through various reviews and systematic reviews. The objective of this review is to present the recent research outcomes in elder abuse interventions.

Keywords: elder maltreatment, elder abuse, psychotherapy, psychoeducation, caregiver, neglect

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1. Introduction

Aging is a natural biological process that exhibits continuing alterations in body, mind, the capacity to function and social interactions. [1] The term geriatric has been specifically granted to older people in relation to healthcare. Starting from geriatric medicine vast applications of geriatric science have found its way in all health related medical and dental specialties. Predictions from various health care bodies estimate that by the year 2050 geriatric population over 60 years will touch the two billion marks. [2] The situation in developing countries, will also see a surge in their population and health care needs. [3] They have also stressed the challenges that healthcare workers will have to face while providing long term and emergency medical care in the future. With this century focusing on the global economic development, taking care of the elderly by their own family members is expected to be a daunting task for migrant workers. [4] One of the socially and politically sensitive issue globally is the suffering of the elderly population by their caretakers/ caregivers, which may be intentional or unintentional. Medical and social sciences recognize it as

elder abuse, elder neglect or elder maltreatment (EAN). Since this issue encompasses a widespread and common type in the form of neglect, for the sake of this review we will use the term elder abuse and neglect (EAN). In a recent systematic review that included 52 studies of twenty-eight different countries, about 16 % of the geriatric population above 60 years were found to be subjected to some form of EAN. [3,5] Elderly with disability (physical or mental), keeping poor mental or physical health and cognitively impaired have been found to be prone to more abuse by both formal and informal caregivers and in different types of settings. [6,7] In a recent classification on elder abuse, fifteen main types with multiple subtypes have been described, [8] which in itself reflects the complexity and enormity of the problem of geriatric maltreatment. Preventive organizations have urged governments to identify EAN as one of the areas where the top priority in research needs to be given. [3,9] There is a disparity between the developed and developing nations when it comes to intervention in elder abuse. [10] With different social and cultural backgrounds, interventions in elder abuse have comprehended legality that should fall within the constitution and legislations of specified countries' governments. [3,11] Individual freedom and rights have further complicated the role of

various governing bodies to intervene, which has laid more emphasis on the preventive intervention modes. [12] Most intervention programs therefore emphasize on the relation and partnership between caregivers and caretakers. [13]

Elderly above 65 years have been reportedly found to have higher rates of using emergency medical department than any other age group. [12,14] This was further exaggerated with the onset of covid -19 pandemic, which saw maximum deaths among the elderly people. [15] Among the various geriatric age groups, most people who died during covid 19 pandemic belonged to the age group of 85 (12 -14%) and above. [16] Covid 19 pandemic also saw a rise in the prevalence of EAN that was termed as high. [17] With a substantial rise in EAN, it is therefore felt that the need of the hour was to review the intervention in EAN, which seem to have suffered a setback by covid 19 pandemic. This review has thus been aimed to appraise scientific evidences related to the intervention of EAN.

2. Methods

A literature search was made on different medical databases that included MEDLINE, Pubmed, Google scholar, Scopus, Proquest, PsycINFO. The search was organized systematically by using various medical and non-medical terms (elder abuse, elder maltreatment, elder neglect, domestic violence, elderly feeding, parental neglect, clinical trial, elder abuse interventions, elder abuse prevention, medical, dental, cross sectional, randomized, qualitative/quantitative, empirical, survey, elder abuse programs, covid 19) and Boolean operators. A team of three authors screened the article titles and abstracts, references, keywords, abstracts, full texts and prepared a pilot form for the review. The focus of selection of articles was primarily on intervention programs at individual, community and institutional levels. Gray literature in the form of unpublished dissertation, conference proceedings, government legislations and reports, WorldOMeter (covid 19) was also screened for data and statistics. The final list for this review included 51 published articles out of which 24 were research articles while the rest included reviews, reports and guidelines.

3. Operational Definitions

EAN has been defined as the partial or complete inability of a formal/informal caregiver to fulfill the basic needs of an elderly person. [3,8,12] A formal caregiver was defined as paid care services provided by an institution/ organization or individual. Informal care was defined as unpaid care that was provided either by a family member, friend, relative to those in need. [8,12] Intervention was defined according to the level which is primary (PI), secondary (SI) and tertiary interventions (TI). PI is a measure which targets the whole population victims of EAN. SI are measures that involve early identification and/or stopping of EAN. TI consult victims of EAN and try to prevent its recurrence. [18,19]

Geriatric healthcare and the need for intervention by healthcare workers (HCW): The prevalence of EAN victims has been studied in different settings; community (16%), medical emergency (55%) and dental (40%). [3,8,20,21] HCW have been instigated to intervene at their levels since they tend to develop a trust filled relationship with elderly people as a result of multiple treatment visits. [17] In developing nations, EAN has been seen mostly as deliberate by caregivers rather than circumstantial. [18] Contrarily, EAN has been also reported to occur in hospitals and at elder homes by the formal/informal HCW (nurses, staff, caretakers, attenders). [8,21] Like its cause, intervention in EAN has also been found to be complex. But because EAN victims can have serious consequences (mortality, hospitalization, compromised health and increased emergency service use), [3,12,21,22] many governments have thus made its hospital accreditation requirement besides urging family doctors/dentists to partake proactive involvement in its intervention or identification. [23] Medical and dental surgeons are prone to see grave forms of physical, sexual and violent abuses in the elderly. [12,24] Other less variety of impaired health outcomes that exaggerate the existing routine problems of old age like dementia, [3,25] are development of severe depression, [21,26] and exaggerated dementia. [27] These conditions in general have been shown to alter patient compliance to medical, dental and other treatments including nursing care. [12,21,28,29,30] Presently, interventions are based on the possibility of identifying risks for imminent harm to the EAN victim. If the risk is high, then the individual must be hospitalized, [31] while if the risk is low, then an intervention can be more individualized. [32]

Current intervention types and their related issues:

There are two basic themes on which interventions are broadly based: to prevent occurrence of the EAN and to manage the consequences of EAN. [33] Different methods of interventions have been advocated which are psychoeducational, psychotherapeutic, support and service based. [12,34,35] Preventive interventions intend to avoid occurrence of EAN by eliminating risk factors. [36] This lays focus more on caregivers rather than victims. Preventive programs are education based interventions which have been found to be associated with improvements of knowledge and recognition about EAN among the elderly population. [12,35,37] Since they are generally given at community level, the effectiveness of these programs has been reported to represent as the largest knowledge gap in literature. [38] Secondary interventions are also aimed at community level in which multidisciplinary teams (hospital or non-hospital based) respond to existing EAN cases. [12,37,39] Community programs largely target rural communities in which the prevalence of EAN has been found to be high (1 out of 6) on average. [40] Rosen et al in 2019, reported that the majority of EAN intervention programs (98%) over the last several decades show low quality study designs. [41] Most of intervention programs have also been found to predominantly focus on victim related outcomes, [35,42] While community programs are assessed for their effectiveness in limited and not related to EAN victim outcomes (effectiveness of program, policies reducing risk, increasing protection etc.). [43] With EAN reported to occur at highly unpredictable intervals (especially physical

abuse), intervention programs have been able to identify static and dynamic factors. [12,44] Studies have also shown that intervention programs cannot be efficient in the presence of static factors (difficult to change). [37,45] Intervention at any level is also at times not possible, like if the abuse is sexual in nature or due to the victim's silence. [24]

4. Family Based Interventions

EAN largely occurs at home (World health organization), which is why it has been recommended that interventions must be culturally appropriate according to the community. [8,46] In family based interventions targeting of family issues that bring conflict has yielded ideal outcomes. [47] While the degree of difficulty in identifying EAN within a family is high, HCW among other professionals have been reported to possess the required training in detecting and intervening EAN. [48] While human neglect is a broad term that has its roots among different relations, many have stated that EAN could be associated with early child neglect by the same parents who is now a victim of EAN. [49,50] A family may also seek a formal caregiving facility for an elderly in which case the FCG has been reported to yield significant results. [51] Reducing abusive behavior and mitigation of EAN risk factors have been achieved by reducing psychosocial stress in nursing staff and family caregivers. [52] Bagshaw et al., studied family mediation as an intervention with promising results in preventing financial abuse of elderly victims. [53] The focus in such interventions has been mainly to resolve relationship conflicts between elderly and their offspring's. Family based cognitive behavioral social work (FBCBSW) intervention in the random control trial effectively reduced emotional, financial and care neglect. [52] Certain interventions have also been targeted at FCGs stress management that is developed during caring for the elderly. Many interventional studies have reported a reduction in EAN occurrence and better understanding of elderly need by FCG's. [12,35,53,54,55] In a study involving patient's sensitization of both FCGs and the elderly victims, the authors have reported to improve the treatment compliance among the EAN victims. [12,35,56] This is in contrast to a study of educational intervention that was given to formal caregivers, where there was no improvement in treatment compliance of oral hygiene maintenance. [57] The differences between the two approaches have been associated with group versus individual intervention. Working with both the victim and the perpetrator is the basis of EAN intervention theory for a model/ program to be effective. [12,35,58] Recent evidence also is in support for psychosocial interventions for EAN, particularly which used combined methods (education and supportive services) for both victim and caregiver. [59] Community based interventions lack quality research which has weakened the strength of the evidence for intervention model. [60]

Association between various forms of human neglect: It is worthwhile to mention that different forms of neglect have been observed in medical science which impair the social, psychological, physical and mental well-being of a

person irrespective of age, sex or community. At early ages various forms of neglecting a child result in poor health outcomes of the child when he grows up to be an adult. [61] Even most caring parents can be responsible for elusive child neglect. [62] The distinguishing feature between the two in terms of measuring with the scientific research is the availability or non-availability of research tools between the two. While child neglect can be measured using different tools (questionnaires, scales), [63] measuring EAN with similar tools has not been without troubleshooting. [53,60] EAN has also the problem of elderly neglecting themselves on their own, which has been termed as self-neglect. [64] Self-neglect has been found to be present in the elderly who are victims of elder abuse and the two need to be differentiated before any intervention is initiated. [65,66]

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References

- [1] De Biase S, Cook L, Skelton DA, Witham M, Ten Hove R. The COVID-19 rehabilitation pandemic. *Age and ageing*. 2020 Sep; 49(5): 696-700.
- [2] Seutodan Hagh H, Rezaeipandari H, Mousavi S, Allahverdipour H. Prevalence and gender differences of elder abuse among community-dwelling older adults in Tabriz, Iran. *Iranian Journal of Ageing*. 2021; 15(4): 458-71.
- [3] Mattoo KA, Shalabi K, Khan A. Geriatric forensics: A dentist's perspective and contribution to identify existence of elder abuse among his patients. *Journal of Forensic Dental Sciences*. 2010; 2(2): 81.
- [4] Gardner W, States D, Bagley N. The coronavirus and the risks to the elderly in long-term care. *Journal of Aging & Social Policy*. 2020; 32 (4-5): 310-5.
- [5] Stephens C, Mays N, Issa R, Perkins L, Scott R. Elder abuse in the UK: out of the shadows and on to the agenda. *BMJ*. 2021; 375.
- [6] Coleman SA. Strategies to Combat Elder Abuse: A Systematic Literature Review (Doctoral dissertation, University of Arizona Global Campus). 2021.
- [7] Eslami B, Di Rosa M, Barros H, Torres-Gonzalez F, Stankunas M, Ioannidi-Kapolou E, et al. Lifetime abuse and somatic symptoms among older women and men in Europe. *PLoS One*. 2019; 14(8): e0220741.
- [8] Mattoo KA, Garg R, Dhingra S. Classifying elder abuse – A review. *Gerontology and Geriatric Research*. 2019; 2(1): 118.
- [9] Cooper C, Livingston G. Elder abuse and dementia. *Advances in elder abuse research: Practice, legislation and policy*. 2020:137-47.
- [10] Mattoo KA, Garg R, Kumar S. Geriatric forensics – part 2: Prevalence of elder abuse and their potential forensic markers among medical and dental patients. *Journal of Forensic Dental Sciences* 2015; 7(3): 201-06.
- [11] Atetwe LK. Prevalence of elder abuse in Emuhaya sub-county, Vihiga County, Kenya. In *International Handbook of Elder Abuse and Mistreatment*; Shankardass, M., Ed.; Springer: Singapore, 2020.
- [12] Garg R, Mattoo K, Kumar L, Khalid I, Baig F, Elnager M, Faridi MA. Impact of Sensitization of Family Caregivers upon Treatment Compliance among Geriatric Patients Suffering from Elder Abuse and Neglect. *Healthcare* 2021; 9: 226.
- [13] El-Khawaga G, Eladawi N, Abdel-Wahab F. Abuse of rural elders in Mansoura districts, Dakahlia, Egypt: Prevalence, types, risk factors, and lifestyle. *Journal of interpersonal violence*. 2021 Mar; 36 (5-6): NP2868-82.

[14] Dufour I, Chouinard MC, Dubuc N, Beaudin J, Lafontaine S, Hudon C. Factors associated with frequent use of emergency-department services in a geriatric population: a systematic review. *BMC Geriatrics*. 2019; 19(1): 1-9.

[15] Elman A, Breckman R, Clark S, Gottesman E, Rachmuth L, Reiff M, Callahan J, Russell LA, Curtis M, Solomon J, Lok D. Effects of the COVID-19 outbreak on elder mistreatment and response in New York City: Initial lessons. *Journal of Applied Gerontology*. 2020; 39(7): 690-9.

[16] Filipka K, Biercewicz M, Wiśniewski A, Jabłońska R, Królikowska A, Główczewska-Siedlecka E, Kędziora-Kornatowska K, Ślusarz R. High rate of elder abuse in the time of covid-19—a cross sectional study of geriatric and neurology clinic patients. *Journal of clinical medicine*. 2021; 10(19): 4532.

[17] Han SD, Mosqueda L. Elder abuse in the COVID-19 era. *Journal of the American Geriatrics Society*. 2020; 68(7): 1386.

[18] Sourinejad H, Noroozi M, Taleghani F, Kheirabadi GR. The process of risky sexual behaviors formation in women drug users: a protocol for a grounded theory study. *Reproductive Health*. 2020; 17: 1-5.

[19] Cattaneo LB, Stylianou AM, Hargrove S, Goodman LA, Gebhard KT, Curby TW. Survivor-centered practice and survivor empowerment: Evidence from a research-practitioner partnership. *Violence Against Women*. 2021; 27(9): 1252-72.

[20] Badawy M, Solomon N, Elsayes KM, Soliman M, Diaz-Marchan P, Succi MD, Pourvaziri A, Lev MH, Mellnick VM, Gomez-Cintron A, Revzin MV. Non accidental injury in the elderly: what radiologists need to know. *Radio Graphics*. 2022; 42(5): 1358-76.

[21] Matto KA, Shalabh K, Khan A. Prevalence of elder abuse among completely edentulous patients seeking complete denture prosthesis – A survey. *J Indian Acad Geriatr*. 2009; 5(4):177-180.

[22] Botngård A, Eide AH, Mosqueda L, Blekken L, Malmedal W. Factors associated with staff-to-resident abuse in Norwegian nursing homes: a cross-sectional exploratory study. *BMC health services research*. 2021; 21:1-20.

[23] Inelmen EM, Sergi G, Manzato E. Elder abuse: are we turning a blind eye to a crucial issue? *Internal and emergency medicine*. 2019; 14: 503-5.

[24] Rosen T, LoFaso VM, Bloemen EM, Clark S, McCarthy TJ, Reisig C, Gogia K, Elman A, Markarian A, Flomenbaum NE, Sharma R. Identifying injury patterns associated with physical elder abuse: analysis of legally adjudicated cases. *Annals of emergency medicine*. 2020; 76(3): 266-76.

[25] Matto K, Mahajan P, Gaba N. Surrogate request for visual brand identification for a completely edentulous patient with dementia. *American Journal of Medical Case Reports* 2014; 2(9): 194-197

[26] Sirey JA, Solomonov N, Guillod A, Zanotti P, Lee J, Soliman M, Alexopoulos GS. PROTECT: a novel psychotherapy for late-life depression in elder abuse victims. *International psychogeriatrics*. 2021; 33(5): 521-5.

[27] Rogers MM, Storey JE, Galloway S. Elder abuse and dementia: A comparison of older people with and without dementia across the prevalence of abuse. *Journal of Applied Gerontology*. 2022;07334648221145844.

[28] Mittal R, Kapoor A, Matto KA. Gender Differences in Terms of Recalling Treatment Instructions – An in Vivo Study. *Journal of Medical Science and Clinical Research* 2018; 6(7): 848-855

[29] Lee J, Solomonov N, Banerjee S, Alexopoulos GS, Sirey JA. Use of Passive Sensing in Psychotherapy Studies in Late Life: A Pilot Example, Opportunities and Challenges. *Frontiers in Psychiatry*. 2021; 12: 732773.

[30] Garg R, Matto KA, Dhingra S. Comparative clinical evaluation of elder abuse impact upon prosthesis maintenance in geriatric patients. *Gerontology and Geriatric Research* 2019; 2(1): 119.

[31] Cimino-Fiallos N, Rosen T. Elder Abuse—A Guide to Diagnosis and Management in the Emergency Department. *Emergency Medicine Clinics*. 2021; 39(2): 405-17.

[32] Rohringer TJ, Rosen TE, Lee MR, Sagar P, Murphy KJ. Can diagnostic imaging help improve elder abuse detection? *The British Journal of Radiology*. 2020; 93(1110): 20190632.

[33] Mikton C, Beaulieu M, Yon Y, Cadieux Genesse J, St - Martin K, Byrne M, Phelan A, Storey J, Rogers M, Campbell F, Ali P. PROTOCOL: Global elder abuse: A mega - map of systematic reviews on prevalence, consequences, risk and protective factors and interventions. *Campbell Systematic Reviews*. 2022; 18(2): e1227.

[34] Sathy T, Premkumar R. Association of functional limitations and disability with elder abuse in India: a cross-sectional study. *BMC Geriatrics*. 2020; 20: 1-1.

[35] Alqarni MA, Mattoo K, Dhingra S, Baba SM, Al SanabaniF, Al Makramani BMA, Akkam HM. Sensitizing family caregivers to influence treatment compliance among elderly neglected patients—a 2-year longitudinal study outcome in completely edentulous patients. *Healthcare* 2021; 9: 533.

[36] Botngård A, Eide AH, Mosqueda L, Malmedal W. Elder abuse in Norwegian nursing homes: a cross-sectional exploratory study. *BMC Health Services Research*. 2020; 20: 1-2.

[37] Sousa RC, Araújo-Monteiro GK, Souto RQ, Santos RC, Leal CQ, Nascimento ND. Interventions to prevent elder abuse in the community: a mixed-methods systematic review. *Revista da Escola de Enfermagem da USP*. 2021; 55.

[38] Mikton C, Campo-Tena L, Yon Y, Beaulieu M, Shawar YR. Factors shaping the global political priority of addressing elder abuse: a qualitative policy analysis. *The Lancet Healthy Longevity*. 2022; 3(8): e531-9.

[39] Burnes D, Hancock DW, Eckenrode J, Lachs MS, Pillemer K. Estimated incidence and factors associated with risk of elder mistreatment in New York State. *JAMA network open*. 2021; 4(8): e2117758.

[40] Fraga Dominguez S, Ozguler B, Storey JE, Rogers M. Elder abuse vulnerability and risk factors: Is financial abuse different from other subtypes? *Journal of applied gerontology*. 2022; 41(4): 928-39.

[41] Rosen T, Elman A, Dion S, Delgado D, Demetres M, Breckman R, Lees K, Dash K, Lang D, Bonner A, Burnett J. Review of programs to combat elder mistreatment: Focus on hospitals and level of resources needed. *Journal of the American Geriatrics Society*. 2019;67(6):1286-94.

[42] Burnes D, MacNeil A, Nowaczynski A, Sheppard C, Trevors L, Lenton E, Lachs MS, Pillemer K. A scoping review of outcomes in elder abuse intervention research: The current landscape and where to go next. *Aggression and Violent Behavior*. 2021; 57: 101476.

[43] Lachs M, Mosqueda L, Rosen T, Pillemer K. Bringing advances in elder abuse research methodology and theory to evaluation of interventions. *Journal of Applied Gerontology*. 2021; 40(11): 1437-46.

[44] Storey JE. Risk factors for elder abuse and neglect: A review of the literature. *Aggression and violent behavior*. 2020; 50:101339.

[45] Chang ES, Levy BR. High prevalence of elder abuse during the COVID-19 pandemic: risk and resilience factors. *The American Journal of Geriatric Psychiatry*. 2021; 29(11): 1152-9.

[46] Nagaraj K, Matto KA, Brar A. Self-Neglect associated with a patient having oral cancer. *Journal of Medical Science and Clinical Research*. 2014; 2(10): 2543-46.

[47] Martin J, Roberts S. The effectiveness of mediation for older people at risk of or experiencing abuse. *Conflict Resolution Quarterly*. 2021; 38(3): 175-87.

[48] Frank AA, Welton RS, Crocker EM. Psychotherapy Education in Psychiatry Residency Training. In *Graduate Medical Education in Psychiatry: From Basic Processes to True Innovation* 2022(pp. 191-214). Cham: Springer International Publishing.

[49] Matto KA, Shabay M. Association between parental negligence in feeding and social activity of obese adults among jazan population. *Niger J Clin Pract* 2020; 23: 1356-67.

[50] Shabay MA, Matto KA. Parental neglect of feeding in obese individuals: A review of scientific evidence and its application among Saudi population. *Saudi Med J* 2020; 41 (5): 451-458.

[51] Mefteh KY, Shenkute BK. Experience of Rural Family Caregivers for Older Adults in Co-Residential Family Care Arrangements in Central Ethiopia: Motives of Family Caregivers in Reciprocal Relationship. *Patient preference and adherence*. 2022; 2473-82.

[52] Wang M, Sun H, Zhang J, Ruan J. Prevalence and associated factors of elder abuse in family caregivers of older people with dementia in central China cross - sectional study. *International Journal of Geriatric Psychiatry*. 2019; 34(2): 299-307.

[53] Bagshaw D, Adams V, Zannettino L, Wendt S. Elder mediation and the financial abuse of older people by a family member. *Conflict Resolution Quarterly*. 2015;32(4):443-80.

[54] Sunmoo YO, Broadwell P, Alcantara C, Davis N, Haeyoung LE, Bristol A, Tipiani D, Nho JY, Mittelman M. Analyzing topics and

sentiments from Twitter to gain insights to refine interventions for family caregivers of persons with Alzheimer's disease and related dementias (ADRD) during COVID-19 pandemic. *Studies in health technology and informatics*. 2022; 289: 170.

[55] Minayo MC. Caring for those who care for dependent older adults: for a necessary and urgent policy. *Ciéncia & Saúde Coletiva*. 2021; 26: 7-15.

[56] Mattoo KA, Gupta I, Darraj A, RA MG. Parental Neglect in Early Childhood Emerging to Adulthood Self-neglect. *American Journal of Medical Case Reports*. 2022;10(5): 131-7.

[57] Albrecht M, Kupfer R, Reissmann DR, M€uhlhauser I, K€opke S. Oral health educational interventions for nursing home staff and residents. *Cochrane Database Syst Rev*. 2016;9.

[58] Westwood S. Abuse and older lesbian, gay bisexual, and trans (LGBT) people: a commentary and research agenda. *Journal of elder abuse & neglect*. 2019; 31(2): 97-114.

[59] Shen Y, Sun F, Zhang A and Wang K (2021) The Effectiveness of Psychosocial Interventions for Elder Abuse in Community Settings: A Systematic Review and Meta-Analysis. *Front. Psychol.* 12:679541.

[60] Baker, P. R., Francis, D. P., Hairi, M., Naqiah, N., Othman, S., & Choo, W. Y. (2017). Interventions for preventing elder abuse: Applying findings of a new Cochrane review. *Age and Ageing*, 46(3), 346-348.

[61] Ludvigsson M, Motamedi A, Westerlind B, Swahnberg K, Simmons J. Responding to Elder Abuse in GERiatric care (REAGERA) educational intervention for healthcare providers: a non-randomised stepped wedge trial. *BMJ open*. 2022; 12(5): e060314.

[62] Mattoo KA, Moaleem M, Shubayr M. An analytical survey to define the dimensions of a scaled questionnaire that would determine the existence of parental neglect in environmentally modulated obese subjects – A pre - pilot and pilot study. *International Journal of Medical Research and Pharmaceutical Sciences* 2018; 5(3): 1-10.

[63] Mattoo KA, Moaleem M, Shubayr M. Assessing the validity and reliability of a questionnaire to identify existence of parental neglect in terms of developing feeding style and social activity in obese adult saudi population. *Journal of Medical Science and Clinical Research* 2018; 6(4): 377-83.

[64] Yu M, Gu L, Shi Y, Wang W. A systematic review of self-neglect and its risk factors among community-dwelling older adults. *Aging & Mental Health*. 2021; 25(12): 2179-90.

[65] Yu M, Gu L, Jiao W, Xia H, Wang W. Predictors of self-neglect among community-dwelling older adults living alone in China. *Geriatric Nursing*. 2019; 40(5): 457-62.

[66] Day MR. Self-Neglect in Older Adults. *Advances in Elder Abuse Research: Practice, Legislation and Policy*. 2020: 85-99.



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