An Exploratory Study of Physician Assistants' Knowledge about the Caregivers of Their Older Patients

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Abstract

Physician Assistants (PAs) within the United States are increasingly responsible for the care of older adults and their caregivers. However, their knowledge of the support needed by caregivers is unknown. There is a dearth of information about how healthcare professionals (i.e., PA) interact with caregivers and identification of existing knowledge gaps. Analyses indicated that only 3.95% of the respondents specialized in geriatrics with approximately half with training about caregivers. Most referred caregivers to resources, yet unfamiliarity with available resources led to referrals not being provided. Topics discussed with caregivers included medication, health coordination, disease process, stress/burnout, living arrangements, and nutrition/meals. Respondents needed information about legal/financial planning, caregiver health, stress/burnout, and patient's management. Building a geriatric workforce to meet the needs of this growing national and international population requires healthcare professionals who are knowledgeable and trained to be able to provide support and care for the caregivers of older adults.

Keywords: Geriatrics; Healthcare Providers; Informal Caregivers; Workforce Development; Physician Assistants

Introduction

The growth of the aging population has been well documented with the number of those 65+ expected to more than double by 2060, constituting more than 34% of the U.S.' population (Colby & Ortman, 2014). The World Health Organization (WHO) indicates that by 2020 the number of adults 85 years and older is projected to rise to 19 million and 40 million by 2050 in European Regions (Evci, Ergin, Saruhan, Benli, Besser, Okur, & Okyay, 2012). This growth brings an increased need for informal caregivers (spouses, adult children, siblings, friends, neighbors, etc.) who provide assistance/care with Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) to the patient, without any financial compensation) and are at the core of care provision to community based older adults. Within the U.S. there are approximately 65.7 million people who are caregivers (The National Alliance of Caregiving and AARP, 2009) and 43.5 million family members who provide care for someone 50+ (Alzheimer's Association, 2013). These numbers are only expected to grow. Additionally, 80% of home care comes from unpaid assistance from these family and friends (ILC-SCSHE Taskforce, 2007). The growing cadre of physician assistants will need to provide care to an older patient population and, also, to the older adult's caregivers.

The PA profession was created in 1965 to improve healthcare and to help with the shortage of primary care physicians which continues today. Geriatric care fits well within this framework (Woolsey, 2005). Educational competencies for PAs include geriatrics (www.nccpa.net, n.d.), but what is clearly lacking, in the curriculum and in the professional literature, is attention to the needs and experiences of informal caregivers, central figures in geriatric care. Caregivers' responsibilities lead them to experience stress, burnout, loss of wages, work-related difficulties, and physical and mental health consequences. They often require support and referrals by the PAs who are treating the older adult patient.

At present, 36% of caregivers turn to their healthcare provider for caregiving information (Family Caregiver Alliance, 2013). Research indicates that 32% of office visits to PAs are for those age 65+ (Hachmuth & Hootman, 2001) and 78% of the PAs indicate treating at least a small portion of patients 85+ (Center for Health Workforce Studies ,2005). Despite this, only 2% of practicing PAs report specializing in geriatric medicine (Woolsey, 2005). The majority of long-term care and health-related services and supports are provided by informal caregivers (Houser & Gibson, 2008). This care typically delays, and even prevents, institutional placement, a societal economic benefit and quality of life benefit for the older person (Family Caregiver Alliance, 2013; Gibson, 2013). The Institute of Medicine (IOM; 2008) indicates that there will be a severe workforce shortage in geriatrics across all areas of healthcare.

Despite the role that PAs play in geriatric care and the importance and value of the PA in the care of the patient's caregiver, little is known about PAs current practices around caregiving and what is needed to allow the PA to fulfill this vital role. It is important to first assess current practices of clinical PAs with caregivers before one can subsequently prepare physician assistants to better fill the gaps in the geriatric workforce. Following this study, PA curriculum, continuing education, and training can be geared to developing and implementing improvements that may be identified to improve the knowledge and care physician assistants provide to the older patient's caregiver.

Methods

This study received approval from New York Institute of Technology's (NYIT) Institutional Review Board. To improve geriatric training, NYIT's College of Osteopathic Medicine received a Health Resources and Services Administration (HRSA) faculty development grant to develop training for osteopathic physicians. An initial study was conducted assessing osteopathic physicians' knowledge and practice around caregiving (Abramson & Lee, n.d.).This study was completed using the same survey used in the physician study. The data reported here focuses only on physician assistants' practice with older adult patients' caregivers.

As there are no validated measures assessing knowledge of and practices with caregivers, the survey assessed information about demographics, current practices, training background, and knowledge of caregiving and was created using information obtained from websites and fact sheets of national caregiving organizations -Family Caregiver Alliance, National Alliance of Caregiving, and the Alzheimer's Association (Family Caregiver Alliance, 2013; The National Alliance of Caregiving and AARP, 2009b). The 28-item questionnaire was divided into sections: demographic information (age, gender, degree, length of time in practice), primary work setting (academia, clinical), type of practice setting (i.e., hospital, long-term care, individual practice); training/educational background (where knowledge of geriatrics comes from, amount of academic training received about geriatrics, specific training about caregivers), basic knowledge about caregivers, and current practices with caregivers (communication with caregivers, types of referrals made, knowledge about resources, financial planning, topics discussed with caregivers, frequency of discussion of these topics, areas where the PA feels they are lacking in training)

Participants were recruited using convenience sampling. A cover letter, including the link to a Google Forms electronic survey, was sent to New York State Society of Physician Assistants' (NYSSPA) members. NYSSPA Government Affairs Chair, directly emailed the cover letter (explaining the study's purpose and completion time required -10 minutes) and survey link to NYSSPA members to protect the identity of individual email addresses. To participate, respondents clicked on the Google Forms link within the email. Participation was voluntary and choosing not to participate required closing the email. One week later, a follow-up email sent out. The link remained active for a period of two weeks. Completed responses were automatically sent to a Google Drive spreadsheet. Seventy-six out of 1287 NYSSPA members completed the electronic survey, constituting a 5.91% response rate.

Data was compiled without any identifying individual information. Descriptive statistics were used to analyze the data for the demographic variables (gender, age, type of practice setting, specialty, and length of time in practice, practice size, how practicing physician assistants are presently working with caregivers, topics discussed, and topics needing more information). To assess relationships between variables, Pearson's product moment correlation coefficients were calculated.

Results

Section I: Demographics

Approximately three-quarters of the sample were female (71.1%) and one-quarter male (28.9%). The majority of were between 51-60 years of age (Figure 1). Most (84.21%) worked in clinical settings, whereas 15.79% worked primarily in academia. The PAs worked in the following specialties: Surgery (27.63%), Family Medicine (23.68%), Internal Medicine (17.11%), Cardiology (2.63%), Gastroenterology (2.63%), Hematology (2.63%), Rheumatology (2.63%), Internal Medicine/Gastroenterology (1.32%), Cardiology/Surgery (1.32%), and 14.47% did not answer. A very small percent (3.95%) indicated specializing in geriatrics. The respondents had been in practice over 21 years (31.58%), followed by those practicing under five years (22.37%), 11-15 years (18.42%), 16-20 years (11.84%),5-10 years (10.53%), and a small percent (5.26%) did not answer. About half (47.36%) worked in hospital settings, 19.76% worked in a small group practice, 17.10% worked in a large group practice, 3.95% worked in an individual practice, 6.57% indicated other, and 6.26% did not answer.

Section II: Practice With Caregivers

PAs reported that their training has included training about caregiver issues/concerns/resources (53.95%) and 46.05% indicated not having training on caregiving. The majority (68.42%) referred caregivers to resources, 30.26% indicated not making referrals, and 1.32% did not answer. Resources used by PAs included: (1) Professional resources (a specialist-psychologist or other medical professional, care manager, clergy, elder law attorney; 59.21%); (2) Educational/concrete services (brochures/pamphlets, internet based, medical equipment/supplies; 53.95%); (3) Agencies (home care; local aging services-i.e., Alzheimer's Association, Department for the Aging; 50%); and (4) Peer Resources (caregiver support groups; 50%). A few (2.63%) said other. Referrals were not made due to not being familiar with available resources (25%), the PA was not asked for referrals (6.58%) or the provider did not have adequate time to make resource referrals (6.58%). A few (3.95%) said other, but were not asked to specify. Communication with caregivers occurs during visits with their older adult relative/patient for the majority (92.11%), with under half communicating by phone (42.11%). A few communicated with the caregiver via email (2.63%) and a few said other (2.63%; not specified). For those not referring caregivers to resources, 28.95% indicated that if given training about resources they would be inclined to pass along the information.

Questions were grouped into categories for topics PAs discussed with caregivers and topics where more information was needed: (1) Planning and Resources (family care coordination, health care coordination, health records, hospice, legal/financial planning (i.e., long-term care), living arrangements (long term care placement, assisted living, etc.), resources, and respite care); (2) Physical and Mental Health of the Care Recipient (behavioral management of care recipient's symptoms, dental care, and the disease process); (3) Information about the Care Recipient's Care (elder abuse, hygiene, medication, nutrition/meals, safety); and (4) Information about Caregiver Health and Mental Health (caregiver health and well-being and caregiver stress/burnout). Figure 2 represents the topics PAs most often discussed with their patients' caregivers. More than half reported talking with caregivers about medication, health care coordination, the disease process, caregiver stress/burnout, living arrangements, and nutrition/meals. Dental care, elder abuse, respite care, and legal/financial planning were the least discussed. The topics they needed more information about (Figure 3) were legal/financial planning, caregiver stress/burnout, behavioral management of care recipient's symptoms, and caregiver health.

Pearson product-moment correlation coefficients were calculated to look at the relationship between variables related to practice with caregivers and several significant relationships were found (Table 1). Males in this sample were older (r= -.348, CI 99%). Length of time in clinical practice was positively correlated to age, with older PAs working in clinical settings for a greater length of time (r= 6.59, CI 99%). Older PAs were more likely to refer to peer (r=.255, CI 95%) and agency resources (r= .233, CI 95%).

Gender Differences

Gender differences were found on several of the variables measured. Males were more likely to make referrals to peer resources (i.e., caregiver support groups) (r = -.316, CI 95%), more likely to communicate with caregivers by email (r= -.258, CI 95%), more likely to allow caregivers time to speak about their own issues/concerns/well-being (r= -.286, CI 95%), ask about other pressures the caregiver might be experiencing (r= -.228, CI 95%), ask about work/care conflicts (r= -.244, CI 95%), and ask about supports available to the caregiver (r= -.319, CI 99%). Females indicated that they would not be more likely to refer caregivers to resources given training (r =.233, CI 95%), but needed more information about family care coordination (r = .246, CI 95%) and living arrangements (r = .231, CI 95%).

Referral to Resources

Those who referred to resources were less likely to discuss the topics of caregiver health/mental health (r=.316, CI 99%), more likely to discuss planning and resources (r= -.367, CI 99%), the care recipient's care (r =-.240, CI 95%), pass along the information if given training (r=.946, CI 99%), likely to refer to educational/concrete services (r= -.538, CI 99%), agencies (r = -.547, CI 99%), peer resources (r= -.485, CI 99%), and professional resources (r= -.602, CI 99%). Those who made referrals to resources were less likely to ask about supports available to the caregiver (r= -.263, CI 95%), and needed more information about hospice (r=.235, CI 95%) and general resources (r=.301, CI 99%). PAs who do not make resource referrals attribute it to caregivers not asking (r=.391, CI 99%), not enough time (r=.391, CI 99%) and not being familiar with good resources (r=.852, CI 99%). Referrals to resources was positively correlated with encouraging caregivers to come to office visits with a list of questions and/or concerns (r=.315, CI 99%).

Topics Discussed and Need for More Information

Those who discussed physical/mental health of the care recipient (r = .286, CI 95%), caregiver health/mental health (r=.299 CI 99%), planning and resources (r=.431, CI 99%), care recipient's care (r=.527, CI 99%) were likely to discuss these topics at every visit. Those in clinical practice longer needed more information about respite care (r=.255, CI 95%). Those who make referrals needed more information about hospice care (r=.235, CI 95%) and resources (r=.301, CI 99%)

Types of Referrals

Respondents who made educational/concrete referrals (i.e., brochures/pamphlets, internet based, medical equipment/supplies) were more likely to refer to agency (home care; local aging services-i.e., Alzheimer's Association, Department for the Aging; r=.537, CI 99%), peer (caregiver support groups; r=.270, CI 95%), and professional resources (specialist-psychologist or other medical professional, care manager, clergy, elder law attorney; r=.497, CI 95%). Additionally, those referring to educational/concrete resources are more likely to discuss the physical/mental health of the care recipient (r=.266, CI 95%), the caregiver's health/mental health (r=.316. CI 99%), planning and resources (r=.457, CI 99%), care recipient's care (r=.406, CI 99%); and need more information about health care coordination (r=.310, CI 99%). Respondents who make referrals to agency resources were more likely to make referrals to peer (r=.370, CI 99%) and professional resources (r=.600, CI 95%); were more likely to discuss caregiver health/mental health (r=.408, CI 99%), planning and resources (r=.579, CI 99%), and the care recipient's care (r=.455, CI 99%); more likely to communicate with caregivers via telephone (r=.411, CI 99%) and need more information about health care coordination (r=.249, CI 95%). Those respondents who made referrals to professional resources were likely to discuss the physical/mental health care of the care recipient (r=.334, CI 99%), planning and resources (r=.501, 99%), communicate with caregivers via telephone (r=.381, CI 99%), be more likely to allow the caregiver to speak about their own issues/concerns/well-being (.257, CI 95%), other pressures that the caregiver was experiencing (r=.322, 99%), work/care conflicts (r=.373, CI 99%), and encourage the caregiver to come to office visits with a list of questions/concerns (r=.306, CI 99%).

Discussion

This study provides an initial exploration of a specific type of healthcare provider's (PA) interactions with the caregivers of their older adult patients. Locally, nationally, and internationally the need for geriatric trained professionals continues to grow and the shortages in the current workforce also are continuing to widen. The need for PAs and other healthcare professionals who have knowledge of both the older adult and their caregiver becomes even more crucial. PA educational programs do contain training, albeit limited, on geriatric assessment and care[6] and cover the basic geriatric competencies, but typically do not focus on the role of the caregiver in the older adult's care.

Caregivers are the backbone of a substantial amount of the care provided to older adults. Yet, caregivers often feel unprepared for their caregiver responsibilities and rely on the healthcare professional to help them navigate this role. Despite this, the IOM (2008) reported in 2008, that only 1% of PAs specialized in geriatrics and earlier PA reports indicated that less than 2% specialized in geriatrics (Woolsey, 2005). Comparatively, the 2010 AAPA census data indicated that 3.38% of PAs who participated in the national census that year, reported specializing in geriatrics (Physician Assistant Census Report, 2013), but according to the Research Project Manager at AAPA, the 2013 Annual survey indicated that 0.7% of clinically practicing PAs specialize in geriatrics. This study found that 3.95% reported specializing in geriatrics (Watson, 2014).

Though still a relatively small number, it slightly higher in this sample than for the 2013 survey. Even if PAs do not choose geriatrics, there is a great likelihood that at some point, they will become caregivers to an older relative. PA practice is well suited to provide care to the geriatric patient in and across all specialties (American Academy of Physician Assistants, 2013). What is not known from the IOM or the AAPA reports is how much of the clinical work undertaken by a PA is with the patient's caregiver.

This study shed some light on the practices of a small sample of PAs around caregiving. It is clear that there are some gender differences with males more likely to make referrals to peer resources, such as caregiver support groups, and communicate with caregivers via email. A surprising finding was that females, who if received training, would not be more likely to make referrals with training. The literature has found that female physicians were more likely to make referrals Franks, Williams, Zwanziger, Mooney, & Sorbero, 2000) .The data indicates that those who made referrals to resources, made referrals to various types of resources. Providers who did make a significant number of referrals to a variety of types of available resources discussed the subject of mental wellbeing fairly often. It might be useful for future studies to explore what specific reasons caused these referrals to be made and if the PA could indeed, with more training, offer these supports themselves. Communication with caregivers via office visits was main method for PA-caregiver communication. There is very little literature that identifies the communication modality of choice for the provider-caregiver and, thus, there is no comparison point for this information. Further research should look to explore this in a larger PA sample and also for other types of healthcare providers. This can help shape training-both in academia and in continuing education programs.

The majority of topics discussed focused on the concrete medical and functional components of caregiving, such as medication, health care coordination, hospice, nutrition/meals, and living arrangements. PAs indicated the need for more information about planning and resources, such as behavioral management of the care recipient and legal/financial planning, and caregiver's physical/mental health. It is apparent that the PAs surveyed are interacting with and caring for caregivers of their patients, even if they do not view themselves as specializing in geriatrics. The number and practice of caring for caregivers is bound to grow with the growing elder population and it is clear from this study that there are gaps in the education and training of physician assistants that require attention.

Limitations

This study is the first to document a segment of healthcare professionals' knowledge about caregiving. As such, the sample contained within this study was small and only indicative of a convenience sample of practicing physician assistants. Further research should expand to include a national and an international sample of healthcare providers that include, but not limited to, physicians, physician assistants, nurses, psychologists, etc. However, this sample was similar in composition to PAs within the United States where most of the PAs are female, but the present sample was slightly older. Within the U.S., the majority of PAs specialize in primary care (including family medicine) and surgical subspecialties, a similar finding in this small sample.

As there are no established, valid measures to assess physician assistant practices or healthcare providers practices around caregiving, future studies should aim to develop a validated and reliable assessment tool that can be used with healthcare professionals. Although there is some literature regarding PAs and geriatrics, there is a dearth of literature about PAs practice and involvement with caregivers. The IOM report indicates that most PAs who specialize in geriatrics work in nursing homes or long-term care facilities. This was not assessed and further investigations about PAs geriatric practice sites can be useful. This study highlights the urgent need for attention to this central component of PAs clinical practice.

Being unfamiliar with available resources highlights an area where there exists opportunities for the development of continuing education for PAs. Practicing PAs can partner with local area offices on aging that can be a valuable resource. It is evident that training is needed about legal/financial planning, caregiver stress/burnout, caregiver health, and the patient's behavioral management. It appears that PA education does not focus on these areas adequately enough and has not been a specific requirement of PA competencies (www.nccpa.net, n.d.). Competent practice should include training on many of these caregiver issues. As the baby-boomers age and are more likely to use technology as a means of communication, practicing PAs may need to consider using and/or adding email or other electronic communication as a vehicle to communicate with the patient's caregiver.

Conclusions

As the population ages it will be necessary to continue to expand the geriatric workforce and have PAs who are trained to work with the older adult and their caregiver. Caregivers bring their own unique health care needs to patient visits due to their roles and responsibilities. Understanding the PAs interactions with caregivers is just the first step and provides the foundation for further development of PA curriculum, training opportunities, and continuing education programs in this very important area.

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References

Abramson, T. A., & Lee, D. (under review). Osteopaths' knowledge about informal caregivers: Implications for education, training, practice, and workforce development. *Journal of the American Osteopathic Association*

Alzheimer's Association. (2012). 2011 Alzheimer's disease facts and figures. *Alzheimer's & Dementia, 7*(2).

Caregiving in the U.S. (2009). Retrieved July 31, 2015, from http://www.caregiving.org/data/Caregiving_in_the_US_2009_full_report.pdf.

Caregiving in the U.S. (2009b). National Alliance for Caregiving and AARP (2009b). http://www.caregiving.org/pdf/research/CaregivingUSAllAgesExecSum.pdf . Retrieved May 5, 2014.

Center for Health Workforce Studies (2005). . *The impact of aging population on the health workforce in the United States.* http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/impactaging2005.pdf Published December 2005. Retrieved June 12, 2014.

Colby, S. L., & Ortman, J. M. (2014, May 1). The baby boom cohort in the United States: 2012-2060. http://www.census.gov/prod/2014pubs/p25-1141.pdf. Retrieved May 20, 2014.

Competencies for the physician assistant profession. http://www.nccpa.net/App/PDFs/Definition%20of%20PA%20Competencies%203.5%20for%20Publication.pdf Retrieved August 10, 2014.

Evci, K., Ergin, F., Saruhan, G., Benli, C., Beser, E. Okur, O. & Okyay, P. (2012). Prevalence and predictors of burden among family caregivers of the elderly in a Western City in Turkey: A community-based, cross-sectional study. *Journal of Medicine and Medical Sciences, 3*(9), 569-577.

Family Caregiver Alliance (2013). https://www.caregiver.org. Retrieved May 1, 2014.

Franks, P., Williams, G.C., Zwanziger, J., Mooney, C., & Sorbero, M. (2000). Why do physicians vary so widely in their referral rates? *J Gen Intern Med, 15*(3), 163-168.

Gibson, M.J. (2013). Valuing the invaluable: A new look at the economic value of family caregiving. AARP Public Policy Institute. http://www.aarp.org/relationships/caregiving/info-2007/ib82_caregiving.html. Retrieved May 20, 2013.

Hachmuth, F.A., & Hootman, J.M. (2001). What impact on PA education? A snapshot of ambulatory care visits involving PAs. *Journal of the American Academy of Physician Assistants, 14,* 49–50.

Houser, A., & Gibson, M.J. (2008). Valuing the invaluable: The economic value of family caregiving. AARP Public Policy Institute. http://www.aarp.org/relationships/caregiving/info-11-2008/i13_caregiving.html. Retrieved June 1, 2014.

ILC-SCSHE Taskforce. 2007. *Caregiving in America.* The Caregiving Project for Older Americans. http://www.agingtech.org/documents/ilc_caregiving_report.pdf. Retrieved August 3, 2014.

Physician Assistant Census Report: Results from the 2010 AAPA Census. (2013, December 10). American Academy of Physicians. Retrieved August 14, 2014, from www.aapa.org/workarea/downloadasset.asx?id=838.

Retooling for an Aging America: Building the Health Care Workforce (2008). Committee on the Future Health Care Workforce for Older Americans, Institute of Medicine http://www.nap.edu/catalog/12089.html. Retrieved July 2, 2014.

Selected caregiver statistics: Fact Sheet. (n.d.). Retrieved June 1, 2014, from https://caregiver.org/selected-caregiver-statistics.

Watson H. Research Project Manager, American Academy of Physician Assistants, personal communication, August 18, 2014.

Woolsey, LJ. (2005). Geriatric medicine and the future of the physician assistant profession. *Perspective on Physician Assistant Education*, 16(1), 24-28

1. Colby SL,.
2. Caregiving
3. Alzheimer's Association.
4. ILC-SCSHE Taskforce. 2007. *Caregiving in America.* The Caregiving Project for Older Americans. http://www.agingtech.org/documents/ilc_caregiving_report.pdf. Retrieved August 3, 2014.
5. Woolsey
6. Competencies for the physician assistant profession. http://www.nccpa.net/App/PDFs/Definition%20of%20PA%20Competencies%203.5%20for%20Publication.pdf Retrieved August 10, 2014.
7. Family
8. Hachm
9. Center for Health Workforce Studies (2005). . *The impact of aging population on the health workforce in the United States.* http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/impactaging2005.pdf Published December 2005. Retrieved June 12, 2014.
10. Houser
11. Gibson
12. Retooling
13. Abramson
14. Selected
15. Caregiving in the U.S. National Alliance for Caregiving. The National Alliance of Caregiving and AARP (2009b). http://www.caregiving.org/pdf/research/CaregivingUSAllAgesExecSum.pdf . Published November 2009. Retrieved May 5, 2014.
16. American Academy
17. Franks
18. Watson H. Research Project Manager, American Academy of Physician Assistants, personal communication, August 18, 2014.

Figure 1: Age Range of Physician Assistants

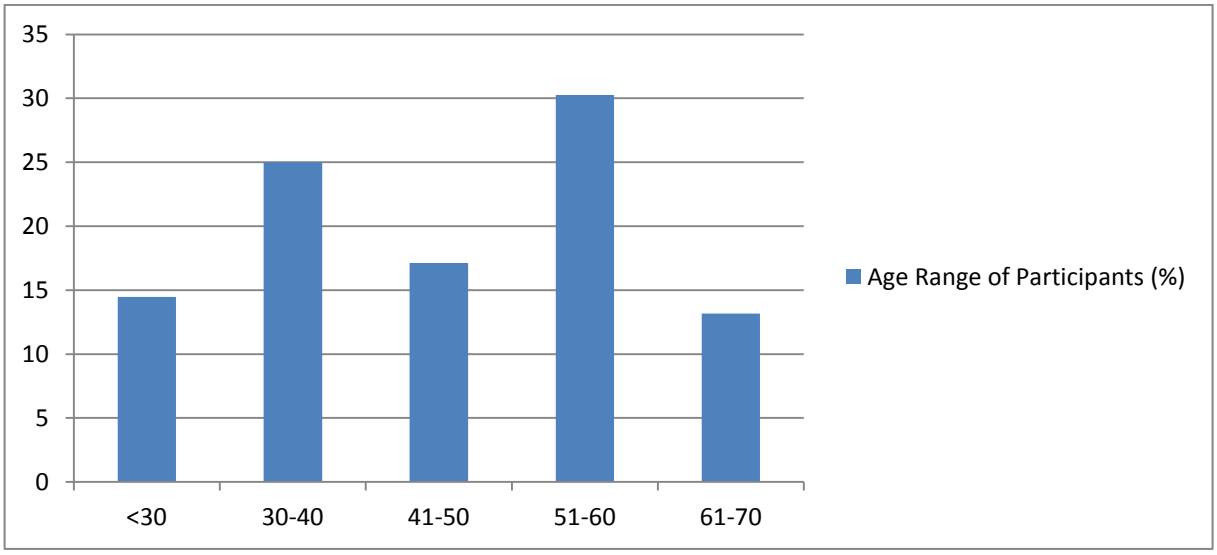

Figure 2: Physician Assistant Topics Discussed With Caregivers

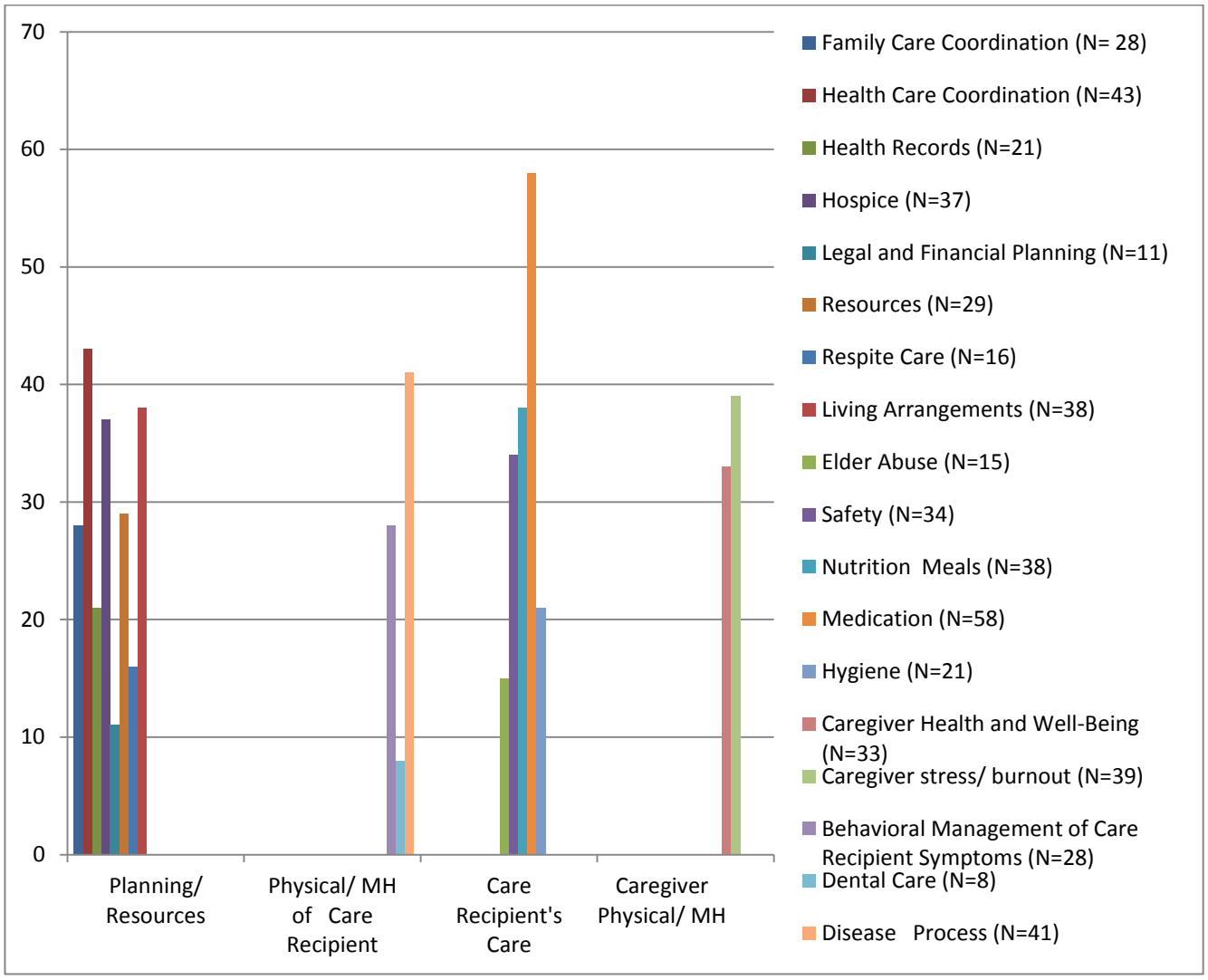
70
60
50
40
30
20
10
0
Planning/ Resources
Physical/ MH of Care Recipient
Care Recipient's Care
Caregiver Physical/ MH
Family Care Coordination (N= 28)
Health Care Coordination (N=43)
Health Records (N=21)
Hospice (N=37)
Legal and Financial Planning (N=11)
Resources (N=29)
Respite Care (N=16)
Living Arrangements (N=38)
Elder Abuse (N=15)
Safety (N=34)
Nutrition Meals (N=38)
Medication (N=58)
Hygiene (N=21)
Caregiver Health and Well-Being (N=33)
Caregiver stress/ burnout (N=39)
Behavioral Management of Care Recipient Symptoms (N=28)
Dental Care (N=8)
Disease Process (N=41)

Figure 3: Topics Physician Assistants' Need More Information About When Talking To Caregivers

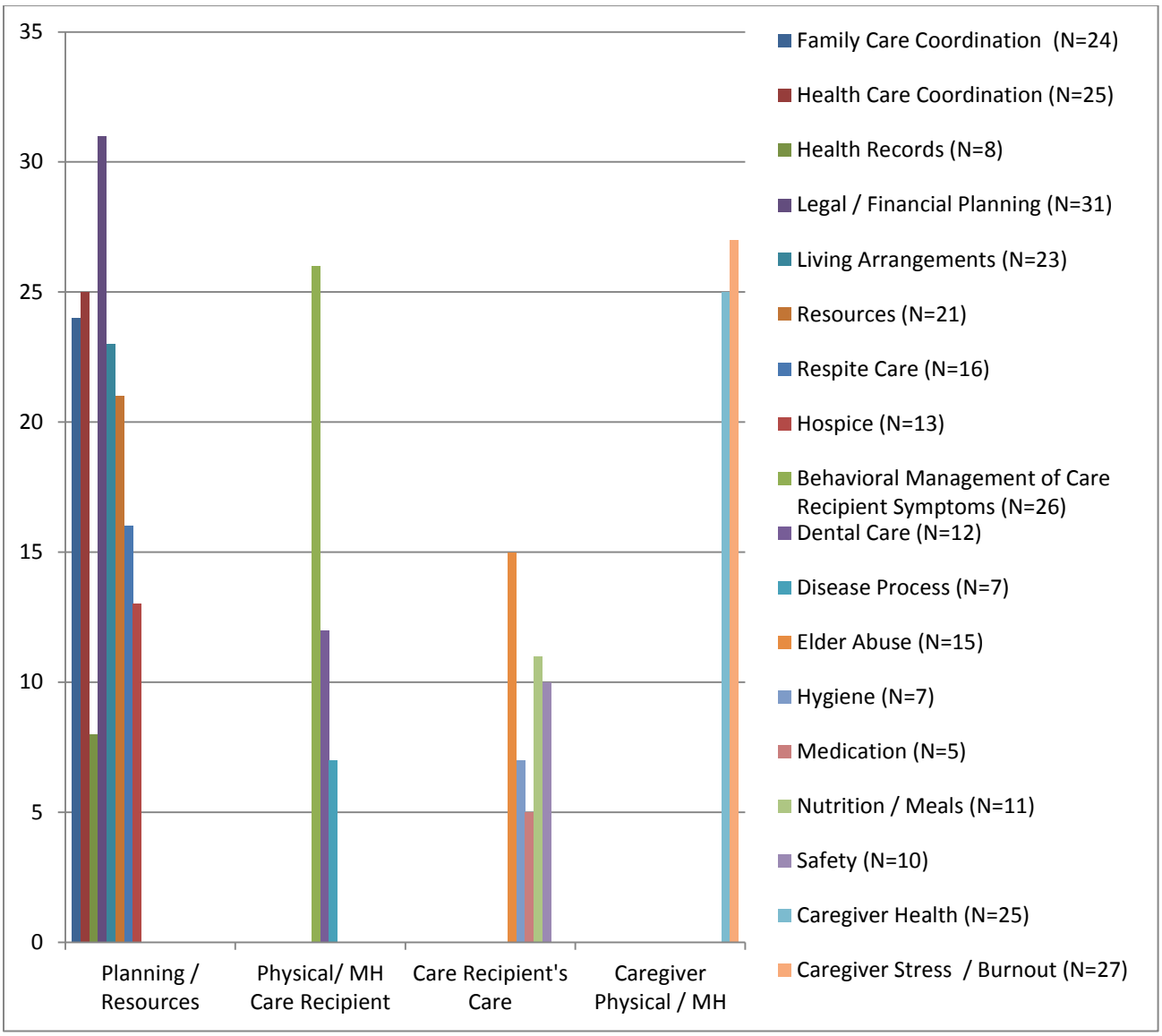

Table 1: Correlations Among Practice Variables

	Gender	Age	Years in Practice	Refer Caregivers to resources	Educational/ Concrete Resources	Agency Resources	Peer Resources	Professional Resources
AGE	-.348**	1	.659**	-.097	-.089	.233*	.255*	.123
REFERRALS/TYPES OF RESOURCES								
Educational/Concrete Referrals	.036	-.089	-.084	-.538**	1	.537**	.270*	.497**
Agency Resources	-.202	.233*	.162	-.547**	.537**	1	.370*	.600**
Peer Resources	-.316*	.255*	.172	-.485**	.270*	.370**	1	.463**
Professional Resources	-.173	.123	.031	-.602**	.497**	.600*	.463**	1
TOPICS DISCUSSED								
Physical/Mental Health - Care Recipient	-.116	.221	.050	-.068	.266*	.204	.367**	.334**
Caregiver Health/Mental Health	-.199	.136	.008	-.271*	.316**	.408**	.385**	.290
Planning and Resources	-.038	.137	.026	-.367**	.457**	.579**	.363**	.501**
Care Recipient Care	.015	.222	.115	-.240*	.406**	.455**	.238*	.412**
COMMUNICATION With CAREGIVERS								
During Patient Visits	.028	-.070	.036	.075	.093	.095	.137	.208
Email	-.258*	.060	.093	-.099	.042	.043	.204	.051
Telephone	-.043	.148	.091	-.181	.097	.411**	.293*	.381**
TOPICS NEED MORE INFORMATION ABOUT								
Behavioral Management	.032	.115	-.083	.085	-.070	.124	.155	.054
Health & Well-Being	.200	.136	.000	.103	-.046	.052	-.107	-.113
Caregiver Stress/Burnout	.049	.092	.048	.011	.033	-.031	-.037	.002
Dental Care	-.042	.019	-.074	-.035	.028	-.140	-.054	.008
Disease Process	-.198	-.148	-.034	-.097	-.075	.030	.115	.119
Elder Abuse	-.048	-.010	-.070	-.023	-.025	-.025	.005	.053
Family Care Coordination	.246*	-.058	-.016	-.114	.143	.145	.088	.013
Health Care Coordination	.200	-.014	-.050	-.188	.310**	.249*	.179	.181
Health Records	.030	-.007	.068	-.117	.138	.191	.249*	.182
Hospice	.136	-.036	-.011	.235*	-.084	-.086	-.009	-.210
Hygiene	.003	.064	.019	-.002	-.023	-.023	.208	-.040
Legal/Financial Planning	.057	.004	-.051	.001	.121	.061	-.013	.012
Living Arrangements	.231*	-.147	-.221	.020	.269*	.139	-.239*	.042
Medication	-.182	-.047	-.018	.061	-.176	.070	.111	-.080
Nutrition/Meals	-.150	.137	.013	-.014	.063	.284*	-.026	.111
Resources	.070	.216	.055	.301**	-.282*	-.045	-.017	-.181
Respite Care	-.097	.190	.255*	.092	.133	.060	-.087	-.037
Safety	-.095	-.189	-.055	.009	-.034	-.081	.084	-.015
IF GIVEN TRAINING ON RESOURCES	.233*	-.096	-.062	.946**	-.574**	-.584**	-.518**	-.642**
ALLOW CAREGIVERS TO…								
Speak about issues/ concerns/well-being	-.286*	.031	.157	-.037	.128	.205	.291*	.257*
Ask about other pressures caregiver is experiencing	-.228*	.117	.168	-1.43	.231*	.219	.356*	.322**
Ask about work/care conflicts	-.244*	.205	.159	-.161	.254*	.369**	.326**	.373**
Ask about supports available to caregiver	-.319**	.225	.173	-.263*	.266	.353**	.418	.452**
Come to office visits with questions/concerns	.036	.096	.071	.286*	.315**	.289*	.248*	.306**
REASONS PA DOES NOT MAKE REFERRALS								
Caregivers do not ask	.169	-.170	-.132	.391**	-.237*	-.242*	-.214	-.266*
There is not enough time	.169	-.170	-.195	.391**	-.237*	-.242*	-.214	-.266*
PA not familiar with good resources	.168	.035	.040	.852**	-.517**	-.526**	-.466**	-.578**