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Dari: Linta Meyla Putri (lintameyla@gmail.com)

Kepada: yuyunhand@yahoo.com

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Sincerely,

Dr. Daisuke Sakai


Associate Editor, **Journal of Orthopaedic Surgery**

daisakai@is.icc.u-tokai.ac.jp

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Warm regards,

Linta Meyla Putri S. KM

 OSJ-21-0059_Exploring Patient Preferences in Orthopaedic Surgery- Implications for Surgical Training and Patient Education.pdf
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Exploring Patient Preferences in Orthopaedic Surgery: Implications for Surgical Training and Patient Education

Journal:	<i>Journal of Orthopaedic Surgery</i>
Manuscript ID	OSJ-21-0059
Manuscript Type:	Original Article
Keywords:	Surgeons, Communication, Education, Patient-centred care
Abstract:	<p>Objective Patient-centred care has been shown to play an important role in patient outcomes. Understanding the professional qualities a patient values can assist surgeons and surgical training programmes to improve patient engagement in health care. The objective of this study was to explore the attributes that orthopaedic patients value in their surgical care providers.</p> <p>Design / Setting This was a survey-based cross-sectional study consisting of 18 questions, asking patients to consider their preferences for surgeon age, gender and various surgeon attributes and behaviours for different surgical scenarios. The survey was provided to adult patients attending the Gold Coast Hospital and Health Service orthopaedic outpatient clinics.</p> <p>Participants There were 181 participants involved in the survey. After exclusions due to incomplete questionnaires, 174 patients were included for analysis with a median (IQR) age of 49 (25) years, 52.3% male and median (IQR) index of socioeconomic disadvantage of 7 (2).</p> <p>Results The majority of patients expressed no preference for surgeon gender regardless of the scenario (93.1 to 97.1%) and 65.9% expressed no preference for the age of their surgeon. For those that did have a preference, 40-49 years was the most common age group preferred (16.8%). The most valued surgeon characteristics included provision of clear explanations, surgical and technical abilities and listening carefully. The characteristics of least value were being involved in student education, involvement in research and attendance at medical conferences.</p> <p>Conclusions The majority of patients have no stated preference for age or gender of their orthopaedic surgeon. Patients highly value interpersonal skills and communication; and show less concern for involvement in research and education.</p>

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Structured Abstract

Objective

Patient-centred care has been shown to play an important role in patient outcomes. Understanding the professional qualities a patient values can assist surgeons and surgical training programmes to improve patient engagement in health care. The objective of this study was to explore the attributes that orthopaedic patients value in their surgical care providers.

Design / Setting

This was a survey-based cross-sectional study consisting of 18 questions, asking patients to consider their preferences for surgeon age, gender and various surgeon attributes and behaviours for different surgical scenarios. The survey was provided to adult patients attending the Gold Coast Hospital and Health Service orthopaedic outpatient clinics.

Participants

There were 181 participants involved in the survey. After exclusions due to incomplete questionnaires, 174 patients were included for analysis with a median (IQR) age of 49 (25) years, 52.3% male and median (IQR) index of socioeconomic disadvantage of 7 (2).

Results

The majority of patients expressed no preference for surgeon gender regardless of the scenario (93.1 to 97.1%) and 65.9% expressed no preference for the age of their surgeon. For those that did have a preference, 40-49 years was the most common age group preferred (16.8%). The most valued surgeon characteristics included provision of clear explanations, surgical and technical abilities and listening carefully. The characteristics of least value were being involved in student education, involvement in research and attendance at medical conferences.

Conclusions

The majority of patients have no stated preference for age or gender of their orthopaedic surgeon. Patients highly value interpersonal skills and communication; and show less concern for involvement in research and education.

Declaration of interest

Declarations of interest: none. The authors report no external funding sources for this study

Introduction

Understanding patient preferences aids the delivery of effective patient-centred healthcare. The importance is perhaps heightened in surgical disciplines, as they typically involve short-term relationships between patient and practitioner, where the cultivation of rapport needs to be rapid. Surgery also encompasses and requires many professional domains including technical ability and decision making, the latter is increasingly a shared process with other members of the healthcare team, including the patient. Shared decision making in medicine is key to improving patient satisfaction and outcome, and providing care that reflects patient values has been shown to enhance patient experience, mitigate risk, increase engagement

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3 46 in healthcare and improve outcomes.¹ Furthermore, it is important that both active surgeons
4 47 and training colleges are cognisant of patient preferences as this will enable more effective,
5 48 targeted patient education and ensure that surgical training frameworks are fostering skills
6 49 and attributes consistent with the expectations of both the profession and the public.
7 50

8 51 A growing body of literature examining patient preferences in healthcare is emerging.
9 52 Previous authors have reviewed the impact of different surgeon characteristics on patient
10 53 engagement and outcomes in a variety of healthcare scenarios, such as physician gender,
11 54 religious backgrounds and preferred attire of their surgeon.²⁻⁴ A recent systematic review of
12 55 86 studies has analysed the factors that influence how patients choose surgeons and
13 56 surgical care, finding that professional characteristics such as surgeon reputation and
14 57 competency were consistently highly valued across multiple surgical subspecialties including
15 58 cancer surgery, cardiovascular surgery and plastic surgery.⁵ Personal attributes including
16 59 interpersonal and communication skills are also considered important and may act as a
17 60 surrogate for decision making if patients are unable to make an assessment of the surgeon's
18 61 technical expertise. There is limited data available in the published literature regarding
19 62 patient preferences in the field of orthopaedic surgery, although surgeon quality, reputation
20 63 and bed-side manner have been identified as important characteristics in both general and
21 64 subspecialty orthopaedic practice.⁶⁻⁹
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24 66 In addition, there has been an increasing dialogue regarding gender and cultural diversity in
25 67 healthcare, particularly regarding gender equality in the male-dominated surgical specialties
26 68 such as orthopaedics. While a series of Dutch patients reported gender preferences for
27 69 specialists involved in more intimate or psychosocial evaluations, no gender preference was
28 70 raised for the surgical specialties.¹⁰ Despite these findings, women continue to be under-
29 71 represented in surgical disciplines, particularly in orthopaedics, with only 3.1% of registered
30 72 orthopaedic surgeons in Australia being female in 2016.¹¹ With regards to physician age,
31 73 studies have previously suggested patients prefer physicians with many years of experience
32 74 who remain up to date on newer treatments available.² As healthcare systems and training
33 75 colleges strive for the development of a workforce that is more representative and reflective
34 76 of community expectations, understanding whether patient preferences could hamper
35 77 training and employment opportunities for women is important. At present, the prevalence of
36 78 gender and age preferences amongst orthopaedic patients in the Australian public has not
37 79 yet been determined.
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40 81 The importance of teaching professionalism to training surgeons has been identified.
41 82 Surgical training programmes now involve key competencies which are considered to be the
42 83 essential professional qualities required to perform as a competent surgeon. These provide
43 84 an assessable framework for supervisors of the developing surgical trainee. Examples
44 85 include the CanMEDS model developed by the Royal College of Physicians and Surgeons of
45 86 Canada and the nine competencies outlined by the Royal Australasian College of Surgeons
46 87 (RACS) in 2003.^{12,13} These nine competencies are considered to be of equal importance by
47 88 RACS, and outline skills such as medical and technical expertise, communication, teamwork
48 89 and scholarship and teaching.¹³ These competencies have been developed to ensure a
49 90 minimum required standard for professional practice and in doing so protect the interests of
50 91 the patient and public. Studies have shown that amongst individual medical professionals
51 92 the importance assigned to these professional competencies is variable, with technical
52 93 expertise often being valued over communication, leadership and collaborative skills.^{14,15}
53 94 However, little is currently known about the patients' perspective of these professional
54 95 standards and whether the priorities of patients are similar to those of healthcare
55 96 professionals.
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58 98 The objective of this study was to investigate the preferences of patients for the attributes
59 99 and behaviours of their orthopaedic care provider in the outpatient setting. This includes

100 reviewing demographic factors as well professional qualities of their surgical care provider.
101 The present study is the first to provide an Australian perspective on the subject, including
102 implications for both patient and surgical education.

103 **Materials & Methods**

104 **Participant Recruitment**

105 This is a single-centre, cross-sectional, survey-based study assessing the preferences of
106 patients in an orthopaedic outpatient setting. The study was conducted from December 2018
107 to January 2019 at the Gold Coast Hospital and Health Service in Queensland, Australia.
108 Participants were recruited from both specialist orthopaedic and non-specialist orthopaedic
109 trauma clinics. Following informed consent, participants completed the self-administered,
110 anonymous questionnaire prior to their scheduled appointments. No incentive or
111 compensation was provided for participation. Institutional ethics approval was obtained from
112 Gold Coast Hospital and Health Service Human Research Ethics Committee, reference
113 number LNR/2018/QGC/47651.

114 **Eligibility Criteria**

115 Eligibility criteria included English-speaking, adult patients aged ≥ 18 years, who were
116 attending the orthopaedic outpatient department. Exclusion criteria included patients under
117 18 years of age, non-English speaking, cognitive or physical impairment precluding
118 completion of questionnaire. Participants who completed less than 50% of the questionnaire
119 were also excluded.

120 **Questionnaire**

121 The questionnaire distributed is included as Appendix 1. Participant demographic variables
122 collected included gender, age and residential postcode. Residential postcode was used as
123 a determinant of socio-economic status using the Index of Relative Socio-economic
124 Disadvantage (IRSD) based on Australian Bureau of Statistics census data, which is graded
125 from 1 to 10, with a score of 1 being the most disadvantaged.¹⁶

126
127 Patients were asked to express preference for the age and gender of their surgeon
128 (provider). Provider age was divided into five categories: 30-39 years old, 40-49 years old,
129 50-59 years old, 60-69 years old and > 70 years old. Gender preferences were assessed in
130 three clinical scenarios: their upcoming clinic visit, total hip replacement surgery and carpal
131 tunnel release surgery. The mock clinical scenarios were chosen to represent situations in
132 which prevalent societal gender stereotypes may be considered desirable in a surgeon. For
133 example, physical strength may be seen as beneficial when undertaking a total hip
134 replacement, while empathic communication skills preferred in clinic consultation, and/or fine
135 motor skills in a nerve release procedure. The participant was also asked to provide a free
136 text response to explain the rationale for their expressed preferences. This has been
137 adapted from previous studies of gender preferences in other surgical fields.¹⁷⁻¹⁹

138
139 Patients preferences for 12 personal and professional surgeon attributes were rated using a
140 modified 5-point Likert scale, ranging from 1 = not at all important to 5 = extremely important.
141 These attributes included technical and surgical expertise, communication style,
142 interpersonal skills and involvement in professional activities. These were selected based on
143 similar studies and professional training guidelines.^{2-9,13,17-34}

144 Data analysis

145 Descriptive data analysis was performed for basic participant demographics and their
146 preference for surgeon gender, age, attributes and behaviours. Quantitative data were
147 analysed using SPSS v27.0 (IBM SPSS Statistics, Armonk, NY, USA) and graphically
148 represented with Microsoft Excel (version 16.44). Thematic analysis was also performed for
149 qualitative data for the free-text responses using a word cloud to display the term frequency -
150 inverse document frequency (TF-IDF) index.^{35,36}

151 Results

152 A total of 181 patients completed the survey. Seven were excluded for inadequate
153 completion rate, resulting in 174 patients included for analysis with a median (interquartile
154 range (IQR)) age of 49 (25) years, 52.3% male and median (IQR) index of relative
155 socioeconomic disadvantage of 7 (2).

157 Table 1 lists a summary of patient responses with regards to age and gender. The majority
158 of participants indicated that they have no expressed preference for age (62.6%). When
159 asked to indicate an age group preference, however, the 40-49 age group was most
160 common (16.7%). Participants stated that the reasons for this were a balance of both
161 experience and currency of practice. Similarly, most participants identified no preference
162 with regard to surgeon gender for their clinic visit (97.1%) or for the proposed surgical
163 procedures (total hip replacement 93.1% or carpal tunnel release 94.8%).

165 Figure 1 presents participant ratings of surgeon attributes or behaviours. Participants
166 assigned similar importance to surgeon communication and expertise. The three most
167 important surgeon attributes or behaviours identified by participants were providing clear and
168 thorough explanations, having excellent surgical and technical abilities, and listening
169 carefully to the patient. There was greater heterogeneity in the importance ascribed to
170 surgeon attendance at professional meetings, active involvement in research, and
171 involvement in teaching and training with these characteristics being rated of lower
172 importance overall.

174 The free-text answers provided by participants have been summarised in Figure 2. As
175 displayed in the word cloud, the most frequently used terms or phrases were "experience"
176 and "doesn't matter", followed by "good job". Recurring themes noted were that patients
177 were not concerned by the age or gender of their surgeon, but rather they wanted a surgeon
178 who was qualified, confident, understanding and would perform surgery to a high standard.
179 There was frequent repetition of the belief that competency was based on training and
180 experience, and was independent of age or gender.

182 Discussion

183 The responses provided in this study suggested patients have little concern for the
184 demographic factors of their surgeon. Our interviewed cohort expressed largely that they
185 would not prefer a surgeon of a particular gender, and the majority of patients had no
186 preference for age. Patients also preferred qualities pertaining to individual skills, such as
187 communication and technical expertise. Qualities of lesser importance included being
188 involved in research, teaching and continuing professional development at conferences.

190 Between 93-97% of Australian orthopaedic patients expressed no preference for the gender
191 of their surgeon. This compared with 89% of orthopaedic patients in a recent study from the

192 UK and 78-84% of orthopaedic patients from the US.^{2,21,37} Despite these findings, gender
193 diversity continues to be an issue challenging many surgical training colleges with the field of
194 orthopaedics having the highest rates of gender disparity. A study by Dusch et al of 476
195 found that patients had no preference for surgeon gender but noted a significant interaction
196 in respondent choice between surgeon demeanour and the type of surgery. For example,
197 patients preferred a more empathic, supportive surgeon for breast cancer surgery compared
198 to a decisive and confident personality for lung cancer surgery.²⁷ In contrast, our study did
199 not find any difference for gender preference based on the nature of the orthopaedic
200 services provided.

202 This study highlights that patients assign equally high importance to both the technical and
203 non-technical aspects of orthopaedic surgery, with surgical and technical expertise highly
204 ranked as on a par with proficiency of communication and emotional skills. Similarly, Bozic et
205 al found interpersonal skills to be the most important factor for selecting a provider for total
206 joint arthroplasty.²⁰ Other studies have identified board certification, reputation or prestige of
207 the surgeon or hospital, in-network provider service and bedside manner as factors that
208 influence a patient's surgeon selection.⁷⁻⁹ These are largely United States-based studies
209 and may reflect factors associated with the local healthcare system and training structures,
210 thereby limiting the generalisability of results. The addition of the findings in this study, in
211 combination with the known literature, suggest that surgical training frameworks should
212 focus on developing interpersonal skills and communication. Some initiatives have already
213 been undertaken by surgical colleges, including mandatory requirements for completion of
214 professional communication courses.³⁸

216 Participants in this study assigned lower importance to surgeon participation in professional
217 and medical community activities including research, training, teaching and continuing
218 professional development. This is in contrast to the emphasis placed on these activities by
219 surgical training colleges, many of which have mandatory requirements for research and
220 professional development of the surgeon. Failure to involve patients actively in research may
221 provide an ongoing disconnect between the relative value of research from the surgeon and
222 patient perspective. This may explain why our patients rated this professional quality of
223 lesser importance to them. While the health care system shifts towards patient-centred care
224 models, research models have been slower to progress in the same direction, where
225 research has continued to be carried out on patients, but not with patients.^{39,40} Other studies
226 have identified barriers in recruiting patients to clinical studies include time constraints, lack
227 of interest, and lack of awareness.¹⁴ Improving patient understanding of the importance of
228 clinical research and continuing education could be considered in future study.

230 Ideally, the priorities for professional values of the patient should match those held by the
231 surgeon in order to establish an effective therapeutic relationship. Indeed, the professional
232 values found to be most desirable in this study parallel those found in a previous study of
233 investigating surgeons' perception of the RACS competencies and their relative importance.
234 It was identified that surgeons value the professional qualities most attributable to individual
235 skill, such as communication and decision making rather than competencies pertaining to
236 skills such as scholarship, teaching and responding to community needs.¹⁴ This suggests
237 that patients and surgeons value professional attributes similarly, and therefore the need for
238 surgeons to demonstrate these competencies across and throughout their training is vital. It
239 is, however, important to recognise that surgical competency is multifaceted, and skills
240 pertaining to community or cultural needs and scholarship are typically considered to be of
241 equal importance to surgeon development and professionalism.

243 The present study has several limitations. Firstly, selection bias may be introduced by
244 recruiting patients from a single public hospital serving a relatively homogeneous patient
245 population. The results may be different if the study was conducted in the private setting or

246 more diverse population groups. Secondly, there is potential for response bias. Participants
247 may moderate their answers to reflect socially acceptable views, therefore the preferences
248 expressed in the survey may be different to the participants' actual preferences. Finally, as
249 an exploratory study the questionnaire was designed from comprehensive review of the
250 available literature but future work should be directed at standardising and validating tools to
251 assess patient preferences.

252
253 Despite these limitations, this study provides new insight into the patient perspective
254 particularly within the Australian community and orthopaedic field. There were a large
255 number of responses from patients who were awaiting orthopaedic evaluation and therefore
256 the responses reflect ecological validity, providing a useful insight into the qualities patients
257 value in their surgical care providers. In a system of competency-based training, studies
258 such as this are useful to understand how the community considers such qualities of surgical
259 competency, particularly when compared with importance surgeons place on similar
260 qualities. Further studies on patient perceptions particularly regarding medical research and
261 scholarship may be of use, particularly given the high importance assigned within most
262 surgical training programmes and the relatively slow transition into the patient-centred care
263 model within the field of medical research.

264 Conclusions

265 In conclusion, Australian orthopaedic patients highly value a surgeon who is both technically
266 competent and an empathic and proficient communicator. They are less concerned about
267 surgeon involvement in research and teaching, or their age and gender. This work can form
268 the basis of future study to further understand what patients want from their orthopaedic
269 surgeon and to shape surgical training to reflect this.

271 Appendices

273 References

- 275 1. Stewart M, Brown JB, Donner A, et al. The impact of patient-centered care on outcomes. *J Fam*
276 *Pract.* 2000;49(9):796-804.
- 277 2. Abghari MS, Takemoto R, Sadiq A, Karia R, Phillips D, Egol KA. Patient perceptions and preferences
278 when choosing an orthopaedic surgeon. *Iowa Orthop J.* 2014;34:204-208.
- 279 3. Samsson KS, Bernhardsson S, Larsson ME. "Take me seriously and do something!" - a qualitative
280 study exploring patients' perceptions and expectations of an upcoming orthopaedic consultation.
281 *Bmc Musculoskelet Di.* 2017;18(1):367. doi:10.1186/s12891-017-1719-6
- 282 4. Aitken SA, Tinning CG, Gupta S, Medlock G, Wood AM, Aitken MA. The importance of the
283 orthopaedic doctors' appearance: A cross-regional questionnaire based study. *Surg.* 2014;12(1):40-
284 46. doi:10.1016/j.surge.2013.07.002

- 1
2
3 285 5. Yahanda AT, Lafaro KJ, Spolverato G, Pawlik TM. A Systematic Review of the Factors that Patients
4 286 Use to Choose their Surgeon. *World J Surg.* 2016;40(1):45-55. doi:10.1007/s00268-015-3246-7
5
6 287 6. Conner-Spady BL, Marshall DA, Bohm E, et al. Patient Factors in Referral Choice for Total Joint
7 288 Replacement Surgery. *Med Care.* 2014;52(4):300-306. doi:10.1097/mlr.0000000000000087
8
9 289 7. Manning BT, Bohl DD, Wang KC, Hamid KS, Holmes GB, Lee S. Factors Influencing Patient Selection
10 290 of a Foot and Ankle Surgeon. *Foot Ankle Specialist.* 2018;11(4):315-321.
11 291 doi:10.1177/1938640017729499
12
13 292 8. Manning BT, Bohl DD, Saltzman BM, et al. Factors Influencing Patient Selection of an Orthopaedic
14 293 Sports Medicine Physician. *Orthop J Sports Medicine.* 2017;5(8):2325967117724415.
15 294 doi:10.1177/2325967117724415
16
17 295 9. Manning BT, Ahn J, Bohl DD, Mayo BC, Louie PK, Singh K. Spine Surgeon Selection Criteria. *Spine.*
18 296 2016;41(13):E814-E819. doi:10.1097/brs.0000000000001385
19
20 297 10. Kerssens JJ, Bensing JM, Andela MG. Patient preference for genders of health professionals. *Soc*
21 298 *Sci Med.* 1997;44(10):1531-1540. doi:10.1016/s0277-9536(96)00272-9
22
23 299 11. health AGD of. Orthopaedic Surgery 2016 Factsheet. Published 2017. Accessed 2021.
24 300 [https://hwd.health.gov.au/webapi/customer/documents/factsheets/2016/Orthopaedic%20surgery.](https://hwd.health.gov.au/webapi/customer/documents/factsheets/2016/Orthopaedic%20surgery.pdf)
25 301 pdf
26
27 302 12. F JR. *The CanMEDS 2005 Physician Competency Framework. Better Standards. Better Physicians.*
28 303 *Better Care.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2005.
29
30 304 13. *Royal Australasian College of Surgeons. Surgical Competence and Performance: A Guide to the*
31 305 *Assessment and Development of Surgeons.* Melbourne: RACS,.; 2008.
32
33 306 14. Hillis DJ, Gorton MW, Barraclough BH, Beckett D. Priorities for professionalism: what do surgeons
34 307 think? *Med J Australia.* 2015;202(8):433-437. doi:10.5694/mja14.00950
35
36 308 15. Arora S, Sevdalis N, Suliman I, Athanasiou T, Kneebone R, Darzi A. What makes a competent
37 309 surgeon?: Experts' and trainees' perceptions of the roles of a surgeon. *Am J Surg.* 2009;198(5):726-
38 310 732. doi:10.1016/j.amjsurg.2009.01.015
39
40 311 16. 2013 COA. 2033.0.55.001 Census of Population and Housing: Socio-Economic Indexes for Areas
41 312 (SEIFA). Published online March 26, 2013.
42
43 313 17. Kim S-O, Kang TW, Kwon D. Gender Preferences for Urologists: Women Prefer Female Urologists.
44 314 *Urol J.* 2017;14(2):3018-3022.
45
46 315 18. Franklin A, Carrico CK, Laskin DM. Societal Preference for Gender of Surgeons Performing
47 316 Patients' Surgery. *J Oral Maxil Surg.* 2017;75(3):458-461. doi:10.1016/j.joms.2016.10.024
48
49 317 19. Veld EAH in 't, Canales FL, Furnas HJ. The Impact of a Plastic Surgeon's Gender on Patient Choice.
50 318 *Aesthet Surg J.* 2017;37(4):466-471. doi:10.1093/asj/sjw180
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52
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60

PATIENT PREFERENCES IN ORTHOPAEDIC SURGERY

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2
3 319 20. Bozic KJ, Kaufman D, Chan VC, Caminiti S, Lewis C. Factors That Influence Provider Selection for
4 320 Elective Total Joint Arthroplasty. *Clin Orthop Relat R*. 2013;471(6):1865-1872. doi:10.1007/s11999-
5 321 012-2640-9
6
7
8 322 21. Bucknall V, Pynsent PB. Sex and the orthopaedic surgeon: A survey of patient, medical student
9 323 and male orthopaedic surgeon attitudes towards female orthopaedic surgeons. *Surg*. 2009;7(2):89-
10 324 95. doi:10.1016/s1479-666x(09)80023-1
11
12 325 22. Jennings JD, Ciaravino SG, Ramsey FV, Haydel C. Physicians' Attire Influences Patients'
13 326 Perceptions in the Urban Outpatient Orthopaedic Surgery Setting. *Clin Orthop Relat R*.
14 327 2016;474(9):1908-1918. doi:10.1007/s11999-016-4855-7
15
16 328 23. Chen JG, Zou B, Shuster J. Relationship Between Patient Satisfaction And Physician
17 329 Characteristics. *J Patient Exp*. 2017;4(4):177-184. doi:10.1177/2374373517714453
18
19
20 330 24. Mason L, Mason J. Patients' attitudes regarding characteristics of physicians in ophthalmology.
21 331 *Bmc Res Notes*. 2017;10(1):733. doi:10.1186/s13104-017-3056-0
22
23 332 25. Groutz A, Amir H, Caspi R, Sharon E, Levy YA, Shimonov M. Do women prefer a female breast
24 333 surgeon? *Isr J Health Policy*. 2016;5(1):35. doi:10.1186/s13584-016-0094-3
25
26
27 334 26. Delgado A, López-Fernández L-A, Luna J de D, Saletti-Cuesta L, Gil N, Jiménez M. The role of
28 335 expectations in preferences of patients for a female or male general practitioner. *Patient Educ*
29 336 *Couns*. 2011;82(1):49-57. doi:10.1016/j.pec.2010.02.028
30
31 337 27. Dusch MN, O'Sullivan PS, Ascher NL. Patient perceptions of female surgeons: how surgeon
32 338 demeanor and type of surgery affect patient preference. *J Surg Res*. 2014;187(1):59-64.
33 339 doi:10.1016/j.jss.2013.10.020
34
35
36 340 28. Ejaz A, Spolverato G, Bridges JF, Amini N, Kim Y, Pawlik TM. Choosing a Cancer Surgeon:
37 341 Analyzing Factors in Patient Decision Making Using a Best–Worst Scaling Methodology. *Ann Surg*
38 342 *Oncol*. 2014;21(12):3732-3738. doi:10.1245/s10434-014-3819-y
39
40 343 29. Furnham A, Petrides KV, Temple J. Patient preferences for medical doctors. *Brit J Health Psych*.
41 344 2006;11(3):439-449. doi:10.1348/135910705x67529
42
43
44 345 30. Dormohammadi T, Asghari F, Rashidian A. What do patients expect from their physicians? *Iran J*
45 346 *Public Health*. 2010;39(1):70-77.
46
47 347 31. Flaishon R, Groutz A, Weinbroum AA. Professionalism and cordiality are Israeli patients'
48 348 expectations and preferences when choosing an anesthesiologist: A pre-anesthesia visit survey.
49 349 *Perioper Care Operating Room Management*. 2016;5:13-19. doi:10.1016/j.pcorm.2016.08.002
50
51
52 350 32. Nolen HA, Moore JX, Rodgers JB, Wang HE, Walter LA. Patient Preference for Physician Gender in
53 351 the Emergency Department. *Yale J Biology Medicine*. 2016;89(2):131-142.
54
55 352 33. Marsidi N, Bergh MWHM van den, Luijendijk RW. The Best Marketing Strategy in Aesthetic
56 353 Plastic Surgery. *Plast Reconstr Surg*. 2014;133(1):52-57. doi:10.1097/01.prs.0000436528.78331.da
57
58 354 34. Waltzman JT, Scholz T, Evans GRD. What Patients Look for When Choosing a Plastic Surgeon. *Ann*
59 355 *Plas Surg*. 2011;66(6):643-647. doi:10.1097/sap.0b013e3181e19eeb

PATIENT PREFERENCES IN ORTHOPAEDIC SURGERY

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- 1
2
3 356 35. *Word Cloud*. Zygomatic <https://www.wordclouds.com/>
4
5 357 36. Uther W, Mladenici D, Ciaramita M, et al. Encyclopedia of Machine Learning. Published online
6 358 2011:986-987. doi:10.1007/978-0-387-30164-8_832
7
8
9 359 37. Dineen HA, Patterson JMM, Eskildsen SM, et al. Gender Preferences of Patients When Selecting
10 360 Orthopaedic Providers. *Iowa Orthop J*. 2019;39(1):203-210.
11
12 361 38. RACS TIPS Eligibility. Accessed January 15, 2021. <https://www.surgeons.org/Education/skills->
13 362 [training-courses/training-in-professional-skills-tips/eligibility](https://www.surgeons.org/Education/skills-training-courses/training-in-professional-skills-tips/eligibility)
14
15 363 39. Tinetti ME, Basch E. Patients' Responsibility to Participate in Decision Making and Research.
16 364 *Jama*. 2013;309(22):2331-2332. doi:10.1001/jama.2013.5592
17
18
19 365 40. Sacristan JA, Aguaron A, Avendaño C, et al. Patient involvement in clinical research: why, when,
20 366 and how. *Patient Prefer Adher*. 2016;Volume 10:631-640. doi:10.2147/ppa.s104259
21
22
23 367
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26 368
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29 369
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370 **Tables**

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372 **Table 1: Participant characteristics and surgeon preferences (n = 174)**

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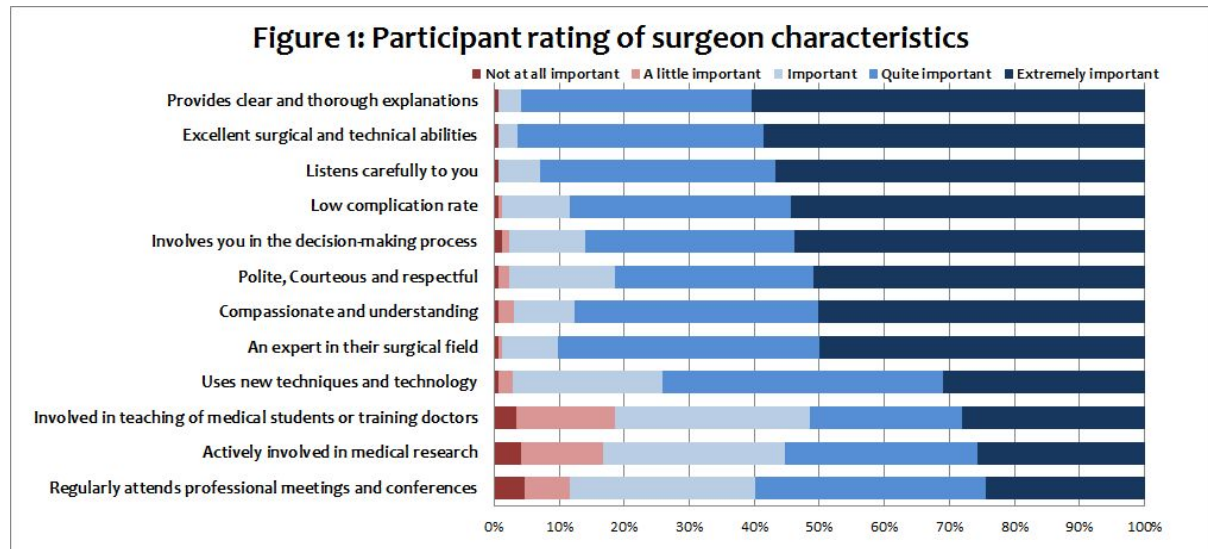
	n (%)		
<i>Surgeon preference (age):</i>			
No preference	109 (62.6)		
30-39 years	13 (7.5)		
40-49 years	29 (16.7)		
50-59 years	11 (6.3)		
60-69 years	1 (0.6)		
> 70 years	1 (0.6)		
	male, n (%)	female, n (%)	No preference, n (%)
<i>Surgeon preference (gender)</i>			
Non-specific procedure	5 (2.9)	0 (0.0)	169 (97.1)
Total hip replacement†	5 (2.9)	2 (1.1)	162 (93.1)
Carpal tunnel release	3 (1.7)	1 (0.6)	165 (94.8)

374 †n = 164, †n = 169

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Figures



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381 Figure 2 Word cloud of free-text responses regarding patient preferences



Questionnaire: Patient Expectations of Orthopaedic Surgeons

You have been asked to participate in this study because you are attending the Orthopaedic Outpatient Department. We are undertaking a study to determine what qualities and characteristics patients value in their orthopaedic doctors so that we can provide a better service for our patients.

This survey is voluntary and you are not under any obligation to participate. Your decision to participate will not affect your treatment, relationship with your treating doctor, or relationship with the Gold Coast Hospital and Health Service. Submitting a completed questionnaire is an indication of consent to participate in the project.

Any complaint will be investigated promptly and you will be informed of the outcome.

Please complete the following questions and return this form to the receptionist before you leave.

What is your gender (please circle)? Male Female Other

How old are you? _____

What is your postcode? _____

Do you have a preference for the gender of your orthopaedic surgeon for your clinic visit?

Male Female No preference

Why? _____

Consider that you are having a Total Hip Replacement for arthritis in your hip. In this situation, do you have a preference for the gender of your surgeon?

Male Female No preference

Why? _____

Consider that you are having surgery to release the nerve in your hand (Carpal Tunnel Release). In this situation, do you have a preference for the gender of your surgeon?

Male Female No preference

Why? _____

Please turn over

Do you have a preference for the age of your orthopaedic surgeon?

Age 30-39 40-49 50-59 60-69 >70

Why? _____

Please indicate how important the following professional and personal attributes are to you when you see an Orthopaedic Surgeon:

	Not at all important	A little important	Important	Quite Important	Extremely Important
Is considered an expert in their surgical field					
Has excellent technical and surgical abilities					
Has a low complication rate					
Uses new techniques and technology					
Is polite, courteous and respectful					
Is compassionate and understanding					
Listens carefully to you					
Provides clear and thorough explanations					
Involves you in the decision-making process					
Is involved in teaching of medical students or training doctors					
Is actively involved in medical research					
Regularly attends professional meetings and conferences					

From the list above, which single attribute to consider to be ***the most important?***

From the list above, which single attribute to consider to be ***the least important?***

Thank you for participating in our study