

Patient aggression towards receptionists in general practice: a systematic review

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ABSTRACT

Objective General practice receptionists provide an essential function in the healthcare system but routinely encounter acts of incivility and aggression from patients, including hostility, abuse and violence. This study was conducted to summarise what is known about patient-initiated aggression towards general practice receptionists, including impacts on reception staff and existing mitigation strategies.

Design Systematic review with convergent integrated synthesis.

Eligibility criteria Studies published at any time in English that examine patient aggression experiences of reception staff in primary care settings.

Information sources Searches of five major databases were performed (CINAHL Complete, Scopus, PubMed, Healthcare Administration Database and Google Scholar) to August 2022.

Results Twenty studies of various designs were included, ranging from the late 1970s to 2022 and originating from five OECD countries. Twelve were assessed as high quality using a validated checklist. Reviewed articles represented 4107 participants; 21.5% were general practice receptionists. All studies reported that displays of aggression towards receptionists by patients were a frequent and routine occurrence in general practice, particularly verbal abuse such as shouting, cursing, accusations of malicious behaviour and use of racist, ablest and sexist insults. Although infrequent, physical violence was widely reported. Inefficient appointment scheduling systems, delayed access to doctors and prescription denial appeared common precipitators. Receptionists adapted their behaviour and demeanour to placate and please patients to avoid escalation of patient frustrations at the cost of their own well-being and clinic productivity. Training in patient aggression management increased receptionist confidence and appeared to decrease negative sequelae. Coordinated support for general practice reception staff who had experienced patient aggression was generally lacking, with a small proportion receiving professional counselling.

Conclusions Patient aggression towards reception staff is a serious workplace safety concern for general practices and negatively affects healthcare sector function more broadly. Receptionists in general practice deserve evidence-based measures to improve their working conditions and well-being for their own benefit and that of the community.

Registration Pre-registered in Open Science Framework (osf.io/42p85).

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Acts of incivility by patients towards general practice staff including doctors are common but the perspectives and interests of general practice receptionists are often omitted from this research.

WHAT THIS STUDY ADDS

⇒ This study has provided evidence that general practice receptionists 'bear the brunt' of patient frustrations arising from inefficiencies in patient management and scheduling systems. Patient aggression not only negatively affects reception staff but also impacts operational factors in general practice via absenteeism and workforce attrition.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Staff training and protocols to manage patient aggression, and ongoing structured staff support should be considered essential in general practice. Evidence-based strategies to prevent, manage and mitigate the harms of patient aggression towards general practice reception staff are urgently needed.

INTRODUCTION

Medical receptionists are core members of high-quality primary care teams,¹ critically important to the functioning of clinics and ensuring patient safety and experience.^{1 2} Receptionists typically provide patients with their first and last interactions and act as gatekeepers to general practice care.^{3 4} Patients' perceptions of the 'helpfulness' of reception staff has been identified as the second most important driver of overall patient satisfaction with general practice care,⁵ indicating their importance to the sector. While the main duties of general practice receptionists have remained largely unchanged since the role's inception,¹ in recent decades receptionists have been reported to perform tasks that carry clinical, medicolegal and ethical implications. These include triaging patients as they call or arrive, providing 'emotional management' in the waiting room, providing first aid, relaying medical reports, and even assisting with certain medical tasks.^{2 6 7} Despite their significance in the healthcare



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landscape, role complexity and risks, becoming a receptionist in a general practice requires little formal qualification and the extent of training offered is minimal and typically done ‘on the job’.² These job characteristics may create a disconnected and relatively voiceless workforce⁶ which could stifle broad sector development and reform. Clearly, strategies to support general practice receptionists are warranted and justified.

Patient aggression in general practice can include acts of incivility (hostility, general rudeness and disrespectful behaviour) and violence (physical and sexual abuse) directed towards clinicians and support staff.⁸ General practice receptionists experience disproportionately more acts of patient aggression compared with their clinician and practice colleagues,⁸ with anecdotal evidence that the COVID-19 pandemic has exacerbated this phenomenon.⁹ Despite recognition that every human should be afforded a safe workplace free from physical or psychological harm,¹⁰ there is presently little understanding of how patient aggression is experienced by general practice receptionists, what the impacts are on this group of workers and what support is provided to them to reduce risks and manage the impacts of such acts directed towards them.

The aim of this review was to synthesise current understanding of patient aggression towards reception staff in general practice. We were interested in summarising the types of aggressive acts experienced by receptionists, revealing the impacts of those acts, and identifying effective mitigation and support strategies to reduce the incidence of patient aggression to support the well-being and function of this important workforce.

METHODS

A systematic review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines.¹¹ We registered the review with the Open Science Framework portal (osf.io/42p85).

Patient and public involvement

Patients and the public were not involved in this study.

Search strategy

A search strategy and search terms were developed (online supplemental table S1) with guidance from an experienced academic librarian, then finalised after pilot searches were performed to confirm sufficient targeting of relevant concepts. Online databases searched were CINAHL Complete, Scopus, PubMed, Healthcare Administration Database and Google Scholar (first 10 pages of results). The following search terms were used in combinations to search each database:

- ▶ Terms related to medical receptionists were ‘reception’, ‘front desk’, ‘clerk’; terms related to primary care were ‘primary care’, ‘general practice’ and ‘ambulatory’.

- ▶ Terms related to acts of hostility and its impacts were ‘stress’, ‘hostility’, ‘aggression’, ‘post-traumatic stress’, ‘workplace stress’, ‘burnout’, ‘occupational stress’, ‘job stress’, ‘absenteeism’, ‘presenteeism’, ‘sick leave’, ‘self-harm’, ‘mental health’ and ‘distress’.

We performed the literature search between July and August 2022. We included any original study published up to July 2022. All search results were imported into systematic review data management software, Covidence (2022).¹² Duplicates were automatically screened and removed by the software. We then performed a period of hand-searching during late August 2022 to ensure inclusion of all eligible studies.

Study screening

Studies were selected using defined eligibility criteria (online supplemental table S2). The three authors used the criteria as a guide to screen in duplicate the title and abstracts of all studies identified via the search. After clearly ineligible studies were excluded, the remaining articles were retrieved for full-text review. Differences in decisions were resolved via discussions between the authors.

The eligibility criteria comprised:

- ▶ Article type: Original research of any study design, including quantitative or qualitative studies, published in English. Opinion pieces without original data were excluded.
- ▶ Setting: Studies undertaken in general practice or primary care settings were included. Studies conducted in specialist or hospital settings, or non-health settings were excluded.
- ▶ Population: Studies where medical receptionists were participants or considered relevant factors of the research were included. Studies examining other members of healthcare teams, without considering medical receptionists, were excluded.
- ▶ Phenomena: Studies that investigated the experiences, attitudes and beliefs of general practice reception staff, or conducted an experiment regarding the incidence or management of hostility and aggression were included. Studies on other clinical or non-clinical topics, such as patient flow or teamwork, without considering hostility and aggression, were excluded.

Data extraction and synthesis

A data extraction plan was developed based on an inductive coding strategy and pilot tested in duplicate on six studies. The finalised extraction template included first author, year of publication, stated aim, country of study, study design, study setting and overview of research findings. Due to the heterogeneity in study design and reporting, a convergent integrated qualitative synthesis¹³ was undertaken to explore the findings within and between included studies. Quantitative results were ‘qualitised’ as per contemporary methodological guidelines to provide a narrative interpretation.¹³ Qualitative and qualitised findings were assembled into categories of similar

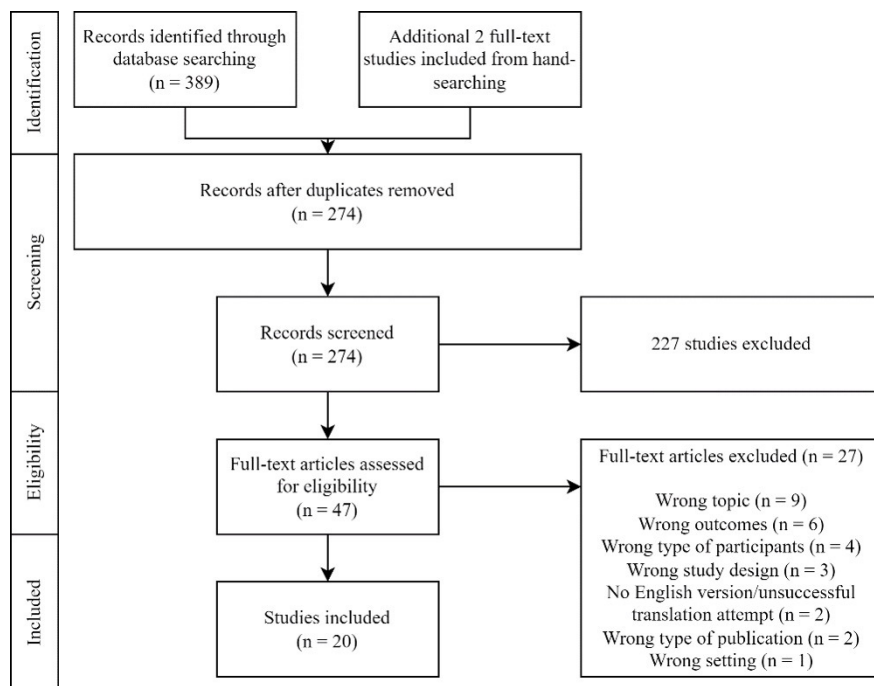


Figure 1 PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) diagram

meaning prior to interpretation. A narrative overview of findings was developed from the categories.

Study quality assessment

The methodological quality of all included studies was assessed using the relevant Johanna Briggs Institute (JBI) Checklist dependant on study design,¹⁴ in which 70% or above is considered high quality. In addition, two reviewers (FW, DC) independently appraised the quality of 20% of studies and ensured they achieved consensus through discussion of any discrepancies in scores. The remaining studies were then independently appraised by one reviewer (FW).

RESULTS

Out of 274 unique studies identified, 20 studies represented by 22 papers were included in the review (figure 1). Twenty-seven studies were excluded at the full-text screening stage for reasons including non-inclusion of general practice medical receptionists as participants (n=4), irrelevant topic (n=9) and two papers used non-English language with no translations available. The remainder of the excluded studies were removed on the basis of irrelevant outcomes (n=6), study design (n=3), setting (n=1) and publication type (n=2). Records for studies with multiple publications from the same study and participant group were merged for analysis. The research quality was highly variable, with JBI Checklist scores ranging from 25% to 100%. However, twelve studies were of high quality (>70% scores). Removal of lower scoring studies did not affect the findings. Due to this, and the exploratory nature of this review, no studies were excluded based on quality. Detailed results of the

quality assessment are available in the supplementary materials (online supplemental table S3).

Study characteristics

The characteristics of the 20 included studies are outlined in online supplemental table S4), organised in chronological order to provide a broad timeline of the research in this field. Most studies included were peer reviewed journal articles (n=18), with one doctoral thesis and one research institute report. A range of study designs were used, including qualitative (n=10), cross-sectional (n=5), prevalence (n=3), quasi-experimental (n=1) and mixed methods (n=1). The types and rates of aggressive acts were retrospectively self-reported with only ethnographic qualitative studies using direct observations.^{7 15-17} Impacts were reported in a variety of ways, including the use of psychometric measures¹⁸⁻²⁰ and qualitative impact statements.^{4 7 21-25} The majority of studies, especially in the early years, originated from the United Kingdom,^{4 7 17 18 22 26-31} four were from Australia,^{8 21 24 32} two from Spain,^{19 23} two from the USA^{15 16} and one from Ireland.³³ The direct 'voice' of the general practice receptionist was exclusively represented in eight studies, either via interviews or as a survey participant.^{7 15 17 18 27 30 32 33} The remainder of receptionists' experiences were reported by or aggregated with those of patients, administrators, managers, directors or doctors of the practice.^{4 8 16 19 21 23 24 26 28 29 31} Overall, 882 (21.5%) of the 4107 participants in the studies reviewed were or had recently been general practice receptionists. In the six studies that detailed gender, receptionists consisted almost exclusively of women, ranging between 98%^{27 33} and 100%^{7 15 18 32} of participants.

Table 1 Examples of acts of patient aggression towards general practice receptionists

Severity category*	Examples
Hostility	<ul style="list-style-type: none"> ▶ Confrontational, frustrated or angry tone of voice^{4 7 17 30} ▶ Impatient and demanding²¹ ▶ 'Insisting on',²⁶ 'bargaining' for⁴ and using manipulation³² for access to appointments ▶ Refusing to answer receptionist's questions about reasons for visit¹⁷ ▶ 'Standover tactics'²⁴ and agitated body language¹⁷ ▶ 'Dirty' or 'contemptuous' looks from patients¹⁹ ▶ Unpredictable temperament¹⁵ ▶ Wrongly attributing blame to receptionist¹⁹
Verbal abuse (eg, shouting, threatening tone, personal insults)	<ul style="list-style-type: none"> ▶ Shouting, yelling^{24 29 31} ▶ Losing temper³¹ ▶ Intimidating³² or threatening tone¹⁸ ▶ Racial abuse^{7 27} ▶ Ableist insults such as 'lazy' and 'dumb'²⁴
Verbal abuse with specific threats (eg, shaking a fist, threatening to strike or harm the receptionist)	<ul style="list-style-type: none"> ▶ Verbal threat of physical violence^{27 33} ▶ Verbal threat to receptionist's family²⁷ ▶ Sexual harassment^{8 27} ▶ Threatened with a razor blade³² ▶ Threatened with a gun³² ▶ Held up and robbed at gunpoint³²
Verbal abuse with physical action against inanimate objects (eg, banging a table, throwing a chair)	<ul style="list-style-type: none"> ▶ Threatened with weapon²⁷ ▶ Slamming doors³²
Physical action without injury (eg, pushing, shoving, blocking access)	<ul style="list-style-type: none"> ▶ Being struck/hit⁸ ▶ Physical action²⁷ ▶ Bag of used syringes thrown at receptionist³² ▶ Property damage⁸ ▶ Theft of staff money and clinic items (drugs, prescription pads)²⁴ ▶ Patient barricading themselves in a bathroom until demands were met²⁴
Physical action with injury (eg, minor cuts and bruises)	<ul style="list-style-type: none"> ▶ Hit on the head with a walking stick³² ▶ Physical assault⁸
Severe harm (injury requiring hospitalisation, stalking, rape, stabbing, gunshot, murder)	<ul style="list-style-type: none"> ▶ Stalking⁸ ▶ Axe attack (on GP)²⁴

*categories adapted from Hobbs²⁸

Acts of patient aggression experienced by general practice receptionists

A summary of the types of patient aggression reported can be found in [table 1](#), using a severity-stepped taxonomy adapted from Hobbs.²⁸ All studies reported that hostility and verbal abuse of receptionists by patients was a frequent, routine and relatively unavoidable occurrence in general practice. The genders of the patients and receptionists involved in the reported episodes of aggression were not described well. Types of verbal abuse included patients shouting, screaming, cursing, use of racist and sexist insults, accusations of malicious behaviour and calling receptionists 'dumb' and 'lazy'.^{7 15 16 19 26 29–32} None of the quantitative studies were prospective; however, the three that attempted to assess the frequency of verbal abuse towards medical receptionists reported that 68%,²⁷ 76%⁸ and 90.1%¹⁹ of receptionist participants recalled they had been verbally abused by a patient in the previous 12 months. Quantitative studies that enquired about whether

receptionists had ever received verbal abuse from patients during their career reported it at near-ubiquitous levels: 82%²⁴ and 99%.³³ One receptionist from the Australian study by Magin *et al*³² reported "We get abused probably nearly every day, verbally, by different people and I think you can only take so much before you're actually going to explode"

Nine studies reported acts of physical violence towards receptionists,^{8 18 19 24 27 29 31–33} with all reporting that physical violence occurred much less frequently than verbal abuse. However, some acts were very severe, including being hit, shaken, held at gunpoint,³² stalked²⁴ and threatened with a razorblade.³² Although the frequency of physical violence was comparatively low, in the study by Parker *et al*²⁴ of Australian general practice clinics, 40–50% of receptionist participants had experienced physical assault during their careers. The waiting area was the most frequently noted setting for in-person acts of aggression towards reception staff. Receptionists

attributed aggressive and hostile acts against them to be most frequently due to patient frustrations with scheduling, administrative systems, errors, access to the medical staff^{4 22} and medication request refusals,²⁴ rather than towards them as an individual, although receiving corollary insults was common.

Impact of patient aggression towards general practice receptionists

The impact of patient aggression towards receptionists' well-being was reported in 12 studies^{4 7 8 15–19 22 23 29 32} and operational impacts were described in five studies.^{8 21 24 32 33}

Despite usually maintaining external composure during the incident, reception staff reported universally negative impacts, with patient aggression reported as the most difficult part of general practice reception work,¹⁵ making the role emotionally laborious.^{7 16} At the time of the aggressive act, most studies reported internalised fear-based responses such as distress, discomfort, panic and 'freeze' response,³² as well as crying and being visibly upset in the reception area soon afterwards,^{17 32} anger⁷ and exasperation.³² In centres where reception staff relayed test results to patients, receptionists reported feeling anxious about how patients would react.²² Accounts from receptionists in the qualitative studies in this review were frequently emotionally moving for the sense of isolation and fear expressed by the participants: 'But it (the violence and aggression from patients) did take me a while to become accustomed to, when I first started here I'd run out the back and cry or run away ... personalising that made me feel like, I suppose, a victim'.³²

Over the longer term, being directly and indirectly exposed to repeated patient aggression was reported to lead to burnout and fatigue,^{23 24} feelings of being inferior and peripheral,¹⁵ self-blame,^{29 32} low self-worth,^{19 32} requiring professional counselling support,^{8 18 33} disengagement from the work role,³² discomfort with the gatekeeping role⁴ and feeling desensitised to aggression.^{19 29} Receptionists in multiple studies had concerns about receiving and managing future aggression and hostility from patients,^{4 18 32} and felt psychologically underprepared and unprotected.^{18 23} To further compound receptionists' exposure to aggression and hostility, doctors were reported to also react poorly at times to requests from receptionists, such as undertaking a task or clarifying a message.^{15 17 22} Operational impacts of patient aggression towards receptionists included staff shortages,²¹ difficulties with workforce retention,^{21 24} absenteeism,^{24 33} increased workload for managers to provide training and support to reception staff³³ and adapt to clinic procedures/policies/protocols^{8 24} and increased costs associated with receptionist training, external counselling and installing increased security measures.^{21 25 33}

Strategies to prevent or address patient aggression towards general practice receptionists

Although many studies reported that a common response to patient aggression was no action,^{17 21 33} strategies to

mitigate and manage patient aggression were suggested in most studies and trialled in four studies.^{4 25 27 30} A summary of these strategies is presented in table 2. Broadly, strategies were preventive, anticipatory, immediate or reactive. The majority of evaluations were qualitative in nature, however strategies that reduced the points of frustration for patients (such as streamlined and flexible scheduling systems, early availability of appointments and consistent patient management practices) appeared likely to be effective at reducing rates of patient aggression. Receptionists reported to be better able to manage patient aggression after receiving relevant training, if they had confidence in their de-escalation skills, and if they could refer to formal policy and rely on backup from management and clinical colleagues. While these strategies may not reduce the frequency of patient aggression, they may mitigate negative impacts on general practice reception staff. For example, Bayman *et al*¹⁸ found that the availability of post-incident support (eg, debriefs, external counselling) affected how safe staff felt at work and significantly moderated the effects of workplace violence on emotional well-being and physical health. Negative emotional and mental health impacts of patient aggression on receptionists appeared more likely for those newer to the role, who had less direct experience in conflict management and who perceived they had limited support. A mass public 'zero tolerance' to patient aggression campaign in Leeds, UK found no change to patient aggression incidence rates.²⁷ Visible safety measures, such as clear acrylic barriers and lockable doors, appear to give general practice receptionists and management a sense of safety but may also increase their and patients' anticipatory concerns about the risk of patient aggression and may undermine the creation of a 'caring' environment in primary care settings.^{24 32}

DISCUSSION

This review examined evidence of patient-initiated aggression towards receptionists in general practice settings. This phenomenon is not new, as our review uncovered evidence for at least the past four decades and likely beyond.²⁶ The International Labour Organisation highlights that workplace violence is a global phenomenon, and that no country, industry or occupational group is free from workplace violence.¹⁰ Statistics into global prevalence are scarce and where data are available, they are difficult to compare rigorously as studies are typically ad hoc, use non-standardised definitions of workplace incivility and under-reporting is suspected.^{10 34} The findings of our study reflect these phenomena and confirm a significant gap in understanding the prevalence, severity and impact of patient aggression in general practice. Our review also uncovered the use of variable terms and definitions of aggression, hostility and violence, different and mostly unvalidated survey tools used for detection and measurement of prevalence, and a tendency to use proxy participants to report on behalf of general practice receptionists.^{21 24} It is therefore

**Table 2** Mitigation and management strategies for patient aggression towards general practice receptionists

Category	Examples
Preventive	<ul style="list-style-type: none"> ▶ Designing clinic layout to protect staff²¹ ▶ Offering a walk-in clinic¹⁷ or provision for same day appointments in scheduling system^{4 30} ▶ Regional 'zero tolerance' campaign and materials²⁷ (established as ineffective) ▶ Engaging patients positively, smiling, making small talk while patients wait for their appointment¹⁶ ▶ High visibility of clinical staff in reception area¹⁷ ▶ Reducing frequency of potentially tense points of contact with the receptionists, for example, fewer outbound calls to patients because of better administration systems⁴ ▶ Use of analysis of patient aggression incidents to inform preventive policy²⁹ ▶ Strategies to ensure consistent messaging to patients about clinic procedures and expectations from reception and clinical staff²³
Anticipatory	<ul style="list-style-type: none"> ▶ Development of formal policy/procedure/protocol/action guides relating to management of patient aggression^{23 24 29 33} ▶ Practice meetings/debriefs/regular receptionists supervision group with receptionist safety and management of patient aggression as regular agenda items^{30 33} ▶ Regular staff training for managing patient aggression^{19 23 24 29 30} ▶ Employment of receptionists already experienced in managing patient aggression^{19 24} ▶ Strategies to enhance staff morale, confidence and trust in management²⁹ ▶ Recording and tracking of aggressive or perceived to be potentially aggressive patients²¹ ▶ Booking double appointments for patients at higher risk of distress and agitation³⁰ ▶ Clinics designed with 'safe rooms' and 'cool down' spaces²⁴ ▶ Provision of locks, alarms, barriers, elevated reception desks, clear acrylic shields between receptionists and patients^{24 25 32 33}
Immediate	<ul style="list-style-type: none"> ▶ Receptionists' own de-escalation techniques developed through experience, for example, apologising,^{15 16} empathising,^{15 16} listening¹⁵ providing explanations,¹⁶ advocating for the patient to the doctor,¹⁵ deferring issue to more senior staff^{24 29} ▶ Use of personal alarms^{24 33} ▶ Active listening skills developed during depression signs identification training³⁰ ▶ Formal written policy and procedures to refer to, which shift perceived responsibility for issue from the individual receptionist to the practice more generally (de-escalation strategy)^{17 23 24} ▶ Maintain 'neutral composure'⁷ and 'contain the spread' of agitation within the waiting area¹⁵ ▶ Calling the police^{24 33} ▶ Offering snacks and water to disgruntled patients¹⁵ ▶ Encouraging patients to sit in their car or outside if distressed by being in the waiting area, with receptionists calling or texting patient when doctor was ready to see them³⁰
Reactive	<ul style="list-style-type: none"> ▶ Removal of patient from practice (ie, they can no longer receive care there)^{31 33} ▶ Systems to document, report and analyse incidents of patient aggression^{24 29} ▶ Change of procedure in response to an incident of patient aggression^{8 24}

Strategies established as effective are in bold.

not surprising that this challenge for general practice has persisted over many years.

Patient-initiated abuse of medical, nursing and ancillary staff in general practice and other medical settings has been reported.²⁴ Unfortunately, general practice receptionists appear to experience verbal abuse almost ubiquitously^{24 33}; so frequently that some general practice stakeholders and receptionists accept it as an occupational hazard.²¹ Verbal abuse is common across all workplaces, especially for those in frontline roles. For example, in Australia alone, 48% of fast-food restaurant, 50% of tertiary education, 67% of healthcare, 68% of juvenile justice and 81% of taxi workers report being verbally abused at work.³⁵ Comparatively, physical violence is less prevalent than instances of verbal abuse against receptionists in general practice, with studies reporting figures between 0.5% and 8%.^{8 18 24 27 33} Across other sectors mentioned previously, physical violence is

reported by approximately 1% of fast-food restaurant and tertiary education, 10% of taxi, 12% of healthcare and 17% of juvenile justice workers.³⁵ While this challenge is clearly prevalent across industries, unique circumstances exist for receptionists in general practice related to the emotional labour of empathising with patients' volunteered accounts of abandonment, grief, loneliness, discomfort and disease-related feelings. These factors are relatively unrecognised in typical reception duties,⁶ but could put general practice reception staff at increased risk of related adverse psychological impacts.^{7 36}

Client-initiated hostility is beginning to be recognised as having greater impacts on workers than even internally perpetrated workplace bullying.^{10 37 38} For general practice receptionists, reported impacts of patient aggression including hostility included reduced work satisfaction,¹⁹ increased workplace stress,²⁴ absenteeism,²⁴ burnout,²⁴

thoughts of leaving the profession,^{24 32} emotional distress^{7 8 16 17} and even lasting psychological^{15 18 23 29 32} and physical harm.^{24 28} These impacts are identical to those reported in other industries, especially hospitality and service industries.³⁹ It is important to recognise that physical forms of aggression and violence do not necessarily mean more severe impacts. Non-physical forms of violence alone can cause not just psychological but also physical harm to employees. These physical harms include sleep disruptions and somatic pain, and a higher risk of sustaining musculoskeletal injuries.³⁷ This potential to significantly affect life outside the workplace suggests potential wide-ranging societal impacts.^{10 34 39} Despite the rare case where physical violence has resulted in serious injury^{28 32} or even homicide,²⁴ it is safe to assume that the majority of negative impacts to worker well-being is likely largely driven by non-physical forms of aggression and hostility simply due to the sheer difference in prevalence between the two forms.

Patient aggression could also negatively impact health service delivery and access.^{21 22 33} For example, receptionists who reported experiencing aggression in turn began to feel the process of communicating abnormal patient test results to be intimidating and anxiety provoking, with some receptionists suggesting they tried to avoid the task altogether.²² The study suggested that this could lead to inefficiencies in communicating important health information to patients.²² Banning a hostile patient from the general practice clinic, while an understandable approach to managing the local risk of hostility, will ultimately impact health service access for that patient and many others who might 'act out'.^{31 33} In some instances, patients might 'act out' in desperation or because of personal or social circumstances^{21 27} and illnesses^{21 26 28 34 40 41} outside their control. However, it is imperative to recognise that most cases of violence are perpetrated by people who do not have a mental illness and violent people with a mental illness are not common among the wider population.^{40 41} Further impacts to patient care come from the risk of reduced service capacity as aggression can reduce workforce retention and staffing numbers.^{21 24 33}

There are gender imbalances when it comes to the impacts of client-initiated hostility across many industries.^{39 42} The retail,⁴³ hospitality⁴⁴ and healthcare sector, particularly in reception⁴⁵ and nursing,⁴⁶ are sectors that are most at risk, but they are also sectors more likely to be dominated by women at the frontline. This increases the exposure to hostile aggression for women workers. Furthermore, women are more frequently the target for client-initiated hostility, particularly verbal and sexual abuse, compared with men.^{40 47} In our review with participant receptionists who were almost exclusively women, those who were the targets of patient aggression reported the emotional exhaustion they experienced to maintain their composure despite feeling angry and upset.^{7 15} Experiencing emotional exhaustion and incivility is a predictor for retaliatory incivility back to clients or reciprocation through counter-productive behaviours such as client sabotage,⁴⁸ intentional rule breaking or procrastination.⁴² Risk factors

for retaliatory incivility include power distance between potential perpetrator and victim, victim gender (men are more likely to retaliate than women) and unfair social or cultural expectations to quietly accept incivility (women, for example, are socially expected to do this) and be skilled in emotionally laborious tasks in healthcare.^{42 49} The clinic receptionist is already recognised as being one of the lowest 'prestige' positions in the general practice workforce,¹⁵ with little authority,²⁶ and the sector is far from achieving gender parity with an extreme over-representation of women.⁴⁵ Although our review did not find any obvious evidence of retaliatory incivility, the impacts of this type of incivility on patient access, experience, quality of care and subsequent behaviour towards other medical team members need to be better understood and documented before they can be appropriately addressed.

Most studies we reviewed discussed current or possible management-initiated strategies for reducing the incidence and impact of patient aggression towards reception staff. However, only five explored specific strategies^{4 18 25 30 31} and none of those objectively evaluated their effectiveness. Rather, they relied on assumed or perceived changes in incidence and severity of both instances and consequences. A wide variety of anticipatory strategies to address patient aggression were suggested, including education and training (eg, training on managing and de-escalating hostility), organisational interventions (eg, reporting mechanisms, trialing open access clinics, enacting policies and procedures to better govern risky situations such as after-hours care) and workplace design (eg, modification of physical waiting room layout). These types of strategies appear common across the healthcare industry.⁵⁰ In the tourism sector, Boukis *et al*⁵¹ demonstrated that supervisor support and particularly an empowering leadership style can moderate the emotional exhaustion, stress, morale and turnover of frontline staff arising from customer aggression.

Education and training type strategies typically resulted in reception staff feeling safer and more confident in dealing with hostile behaviours. Although this is a relevant outcome for the well-being of general practice receptionists, there was no evidence that training reduced the incidence of hostile behaviours.^{18 19 21 23 24 29} This is also true across many other industry contexts and serves to ensure workers are equipped to deal with violence, but does little to prevent it from surfacing in the first instance.³⁸ Interestingly, Dixon *et al*²⁷ evaluated the outcomes of a campaign to educate the public about patient-initiated hostility as a way to prevent it in the first place. However, they found no effect in reducing incidences of hostility towards receptionists.²⁷ At the time of writing, little published evidence of mass media education campaigns against violent behaviours exists, and evaluating such interventions against violent behaviours is difficult to perform and thus uncommon.⁵² However, public campaigns are known to be a catalyst for social change and broader public discussion.^{39 52} Zhou *et al* found that across hospitality literature, public messages suggesting injunctive consequences (eg, 'hostility can be subject to criminal penalties') were more

effective in preventing hostility compared with descriptive messages (eg, 'please be mindful of your words and actions').³⁹ There is a clear opportunity to rigorously test a range of initiatives that aim to prevent and manage hostility and aggression in general practice.

The apparent reliance of general practice clinics on receptionists to develop their own de-escalation strategies and independently build resilience against patient aggression is concerning. Several studies mentioned that part of a receptionist's role, either formally or informally, is to engage with patients positively despite circumstances, de-escalate challenging situations, keep patients calm and maintain composure.^{15 16 29 30} Studies from hospitality literature describe that good client rapport reduces instances of client misbehaviour, yet prioritising this as a de-escalation tool is ineffective long term and actually led to clients misusing their rights later.³⁹ Furthermore, Morrison¹⁵ and Strathmann *et al*¹⁶ found receptionists reporting this strategy adds to the emotional labour associated with the role, which in turn could lead to consequences discussed earlier such as retaliatory incivility and burnout.^{15 16} Although raising questions of health access equity, Zhou *et al* reported that removal of the problematic client was considered effective, and this was reported as a strategy in some of the studies we reviewed.^{31 33 39}

This review has notable limitations. Our study included research conducted over a 40-year period, with the reviewed studies indicating significant changes to the duties of the general practice receptionist, necessitated by the development of technology to automate clerical tasks and changes to telecommunication methods which, in turn, may have influenced the circumstances predicating patient aggression. While greeting patients and arranging access to medical professionals has remained the main role of the general practice receptionist, another significant limitation is that the external precursors of patient aggression and types of actions interpreted as aggression are likely to have changed with social and professional norms, with older studies probably having less relevance to understanding patient aggression today. Issues identified with the shifting and varied definitions of patient aggression represent potential limitations to the likelihood of capturing all the relevant published literature, but the search terms were intentionally broad and multiple databases were used to minimise this factor. Concierge services in the hospitality and tourism industries have experienced increases in client-related hostility and aggression over recent years, exacerbated by the COVID-19 pandemic. Receptionists in general practice settings were similarly affected by the safety precautions necessary during the COVID-19⁹ pandemic so patterns of patient aggression may have changed but are not yet apparent in the literature. Our study has highlighted that the experiences and well-being of general practice receptionists are under-studied in general, and even in research about general practice reception, receptionists are under-represented as participants. Accordingly, this is a limitation of the current research but should also provide the impetus for enhancing the rigour of research in this sector.

CONCLUSION

This systematic review of patient aggression against general practice receptionists has uncovered an urgent need for higher quality studies investigating multi-faceted approaches to preventing, managing and recovering from patient aggression in the healthcare setting, especially for general practice receptionists. Receptionists are the recipients of unremitting verbal abuse and hostility from patients and adapt their behaviour and demeanour to placate and please patients to avoid escalation of patient frustrations. Although infrequent, physical violence is a real threat. This review has shown that many root causes of patient aggression towards receptionists arise from avoidable operational factors, such as inefficient scheduling systems and difficulties in communicating with the medical staff. However, reception staff are placed in the unenviable position of having to deal with the aftermath of the poor function of these systems without having the status or autonomy to overhaul them. It is clear that receptionists in general practice deserve evidence-based measures to improve their working conditions and well-being, which will no doubt also have flow-on benefits for the community and entire healthcare sector.

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Contributors LB devised, supervised and acted as guarantor of the study. DC and FW developed the search terms and strategy with guidance from the institution academic librarian. FW carried out the searches, screening, extraction, analysis and interpretation of results in consultation with LB and DC. LB and DC conducted independent extraction of 20% of results and participated in consensus-seeking discussions. DC conducted independent quality assessments on 20% of results to ensure tool fidelity. FW and DC wrote the manuscript in consultation with LB. FW submitted the manuscript and addressed reviewer feedback. All authors reviewed the results and approved the final version of the manuscript.

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REFERENCES

- Litchfield I, Gale N, Burrows M, et al. The future role of receptionists in primary care. *Br J Gen Pract* 2017;67:523–4.
- Neuwelt PM, Kearns RA, Browne AJ. The place of receptionists in access to primary care: challenges in the space between community and consultation. *Social Science & Medicine* 2015;133:287–95.
- Offredy M. Access to primary care: decision making by GP receptionists. *Br J Community Nurs* 2002;7:480–5.
- Ahluwalia S, Offredy M. A qualitative study of the impact of the implementation of advanced access in primary healthcare on the working lives of general practice staff. *BMC Fam Pract* 2005;6:39.
- Paddison CAM, Abel GA, Roland MO, et al. Drivers of overall satisfaction with primary care: evidence from the English general practice patient survey. *Health Expect* 2015;18:1081–92.
- Litchfield L, Burrows M, Gale N, et al. Understanding the invisible workforce: lessons for general practice from a survey of receptionists. *In Review* [Preprint] 2021.
- Ward J, McMurray R. The unspoken work of general practitioner receptionists: a re-examination of emotion management in primary care. *Social Science & Medicine* 2011;72:1583–7.
- Herath P, Forrest L, McRae I, et al. Patient initiated aggression-prevalence and impact for general practice staff. *Aust Fam Physician* 2011;40:415–8.
- Woodley M. New guide to help manage escalating patient aggression 2021. Available: <https://www1.racgp.org.au/newspg/professional/new-guide-to-help-manage-escalating-patient-aggress>
- ILO. *Safe and healthy working environments free from violence and harassment*. Geneva: International Labour Organisation, 2020.
- Page MJ, Moher D, Bossuyt PM, et al. PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *BMJ* 2021;372:160.
- Covidence Systematic Review Software. Melbourne: Veritas Health Innovation, 2022.
- Silver S, Francis E, Phillips C. Concepts and considerations for mixed methods systematic reviews. In: Aromataris E, Munn Z, eds. *JBIM Manual for Evidence Synthesis*. Adelaide: JBI, 2022.
- Johanna Briggs Institute. Critical appraisal tools. 2022. Available: <https://jbi.global/critical-appraisal-tools>
- Morrison. *Reconstructing the Role of the Medical Receptionist: A Qualitative Exploration of the Experiences of Women who Work as Reception Staff in Medical Offices*. Barcelona, Spain: Universitat Ramon Llull, 2022.
- Strathmann CM, Hay MC. Working the waiting room: managing fear, hope, and RAGE at the clinic gate. *Med Anthropol* 2009;28:212–34.
- Hammond J, Gravenhorst K, Funnell E, et al. Slaying the dragon myth: an ethnographic study of receptionists in UK general practice. *Br J Gen Pract* 2013;63:e177–84.
- Bayman PA, Hussain T. Receptionists' perceptions of violence in general practice. *Occupational Medicine* 2007;57:492–8.
- López-García C, Ruiz-Hernández JA, Llor-Zaragoza L, et al. User violence and psychological well-being in primary health-care professionals. *European Journal of Psychology Applied to Legal Context* 2018;10:57–63.
- Ruiz-Hernández JA, López-García C, Llor-Esteban B, et al. Evaluation of the users violence in primary health care: adaptation of an instrument. *International Journal of Clinical and Health Psychology* 2016;16:295–305.
- Ceramidas DM, Parker R. A response to patient-initiated aggression in general practice: Australian professional medical organisations face a challenge. *Aust J Prim Health* 2010;16:252–9.
- Bowie P, Halley L, McKay J. Laboratory test ordering and results management systems: a qualitative study of safety risks identified by administrators in general practice: table 1. *BMJ Open* 2014;4:e004245.
- Pina D, Peñalver-Monteagudo CM, Ruiz-Hernández JA, et al. Sources of conflict and prevention proposals in user violence toward primary care staff: a qualitative study of the perception of professionals. *Front Public Health* 2022;10.
- Parker R, Ceramidas D, Forrest LE, et al. *Patient initiated aggression and violence in the Australian general practice setting*. 2017. Canberra: Australian Primary Health Care Research Institute (APHCRI).
- Magin P, Joyce T, Adams J, et al. General practice as a fortress-occupational violence and general practice receptionists. *Aust Fam Physician* 2010;39:854–6.
- Arber S, Sawyer L. The role of the receptionist in general practice: a "dragon behind the desk"? *Soc Sci Med* 1985;20:911–21.
- Dixon CAJ, Tompkins CNE, Allgar VL, et al. Abusive behaviour experienced by primary care receptionists: a cross-sectional survey. *Fam Pract* 2004;21:137–9.
- Hobbs FD. Violence in general practice: a survey of general practitioners' views. *BMJ* 1991;302:329–32.
- Naish J, Carter YH, Gray RW, et al. Brief encounters of aggression and violence in primary care: a team approach to coping strategies. *Fam Pract* 2002;19:504–10.
- White C, Riley A, Smith S. Awareness of depression at the reception desk: education for primary care receptionists. *Education for Primary Care* 2008;19:173–90.
- Sampson F, Munro J, Pickin M, et al. Why are patients removed from their doctors' Lists? A comparison of patients' and doctors' accounts of removal. *Fam Pract* 2004;21:515–8.
- Magin P, Joyce T, Adams J, et al. Receptionists' experiences of occupational violence in general practice: a qualitative study. *Br J Gen Pract* 2009;59:578–83.
- Chambers F, Kelly M. Violence at work: the experience of general practice receptionists. *Ir Med J* 2006;99:169–71.
- Rowe L, Kidd MR. Increasing violence in Australian general practice is a public health issue. *Med J Aust* 2007;187:118–9. 10.5694/j.1326-5377.2007.tb01157.x Available: <https://doi.org/10.5694/j.1326-5377.2007.tb01157.x>
- Mayhew C, Chappell D. Violence in the workplace. *Med J Aust* 2005;183:346–7. 10.5694/j.1326-5377.2005.tb07080.x Available: <https://doi.org/10.5694/j.1326-5377.2005.tb07080.x>
- Chu KH, Baker MA, Murrmann SK. When we are onstage, we SMILE: the effects of emotional labor on employee work outcomes. *International Journal of Hospitality Management* 2012;31:906–15.
- Pacheco ECRL, Bártolo A, Rodrigues F, et al. Impact of psychological aggression at the workplace on employees' health: a systematic review of personal outcomes and prevention strategies. *Psychol Rep* 2021;124:929–76.
- Yagil D. Abuse from organizational outsiders: customer aggression and incivility. special topics and particular occupations, professions and sectors. 2021:109–34.
- Zhou Y, Mistry TG, Kim WG, et al. Workplace mistreatment in the hospitality and tourism industry: a systematic literature review and future research suggestions. *Journal of Hospitality and Tourism Management* 2021;49:309–20.
- Mayhew C. Occupational violence: a neglected occupational safety and health issue? *Policy and Practice in Health and Safety* 2003;1:31–58.
- Friedman RA. Violence and mental illness -- how strong is the link? *N Engl J Med* 2006;355:2064–6.
- Loh J, Khan MI, Johns R. The straw that breaks the camel's back: service provider vulnerability to customer incivility. *JSTP* 2022;32:545–64.
- Chang J, Travaglione T. Employee gender characteristics among retail sectors. In: Proceedings of the 12th international conference of the Society for Global Business & Economic Development; Society for Global Business & Economic Development (SGBED), 2011:861–9.
- Santero-Sanchez R, Segovia-Pérez M, Castro-Nuñez B, et al. Gender differences in the hospitality industry: a job quality index. *Tourism Management* 2015;51:234–46.
- Australian Government. Labour market insights: medical receptionists. 2023. Available: <https://labourmarketinsights.gov.au/occupation-profile/medical-receptionists?occupationCode=542114>
- Boniol M, McIsaac M, Xu L, et al. *Gender equity in the health workforce: analysis of 104 countries*. World Health Organization, 2019.
- Fisher BS, Gunnison E. Violence in the workplace: gender similarities and differences. *J Crim Justice* 2001;29:145–55.
- Wang M, Liao H, Zhan Y, et al. Daily customer mistreatment and employee Sabotage against customers: examining emotion and resource perspectives. *AMJ* 2011;54:312–34.
- Riley R, Weiss MC. A qualitative thematic review: emotional labour in healthcare settings. *J Adv Nurs* 2016;72:6–17.
- Cochrane Work Group, Spelten E, Thomas B, et al. Organisational interventions for preventing and minimising aggression directed towards healthcare workers by patients and patient advocates. *Cochrane Database Syst Rev* 2020.
- Boukis A, Koritos C, Daunt KL, et al. Effects of customer incivility on frontline employees and the moderating role of supervisor leadership style. *Tourism Management* 2020;77:103997.
- World Health Organization. Violence prevention, the evidence: changing cultural and social norms that support violence report 9241598336. Malta; 2009.