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, ableist 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.

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.

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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
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. General practice receptionists experience disproportionately more acts of patient aggression compared with their clinician and practice colleagues, with anecdotal evidence that the COVID-19 pandemic has exacerbated this phenomenon. Despite recognition that every human should be afforded a safe workplace free from physical or psychological harm, there is presently little understanding of how patient aggression is experienced by 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. We registered the review with the Open Science Framework portal (osf.io/4zp85).

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’.


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 synthesis 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. Qualitative and qualitised findings were assembled into categories of similar
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 using 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 15 18 22 26–31 four were from Australia,8 21 24 32 two from Spain,19 23 two from the USA15 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.
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Table 1  Examples of acts of patient aggression towards general practice receptionists

<table>
<thead>
<tr>
<th>Severity category*</th>
<th>Examples</th>
</tr>
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</table>
| Hostility          | ▶ Confrontational, frustrated or angry tone of voice\textsuperscript{4,17,30}  
▶ Impatient and demanding\textsuperscript{21}  
▶ ‘Insisting on’,\textsuperscript{26} ‘bargaining’ for\textsuperscript{4} and using manipulation\textsuperscript{32} for access to appointments  
▶ Refusing to answer receptionist’s questions about reasons for visit\textsuperscript{17}  
▶ ‘Standover tactics’\textsuperscript{24} and agitated body language  
▶ ‘Dirty’ or ‘contemptuous’ looks from patients\textsuperscript{19}  
▶ Unpredictable temperament\textsuperscript{15}  
▶ Wrongly attributing blame to receptionist\textsuperscript{19} |
| Verbal abuse (eg, shouting, threatening tone, personal insults) | ▶ Shouting, yelling\textsuperscript{24,29,31}  
▶ Losing temper\textsuperscript{31}  
▶ Intimidating\textsuperscript{32} or threatening tone\textsuperscript{18}  
▶ Racial abuse\textsuperscript{7}  
▶ Ableist insults such as ‘lazy’ and ‘dumb’\textsuperscript{24} |
| Verbal abuse with specific threats (eg, shaking a fist, threatening to strike or harm the receptionist) | ▶ Verbal threat of physical violence\textsuperscript{27,33}  
▶ Verbal threat to receptionist’s family\textsuperscript{27}  
▶ Sexual harassment\textsuperscript{8,27}  
▶ Threatened with a razor blade\textsuperscript{32}  
▶ Threatened with a gun\textsuperscript{29}  
▶ Held up and robbed at gunpoint\textsuperscript{32} |
| Verbal abuse with physical action against inanimate objects (eg, banging a table, throwing a chair) | ▶ Threatened with weapon\textsuperscript{27}  
▶ Slamming doors\textsuperscript{32} |
| Physical action without injury (eg, pushing, shoving, blocking access) | ▶ Being struck/hit\textsuperscript{8}  
▶ Physical action\textsuperscript{27}  
▶ Bag of used syringes thrown at receptionist\textsuperscript{32}  
▶ Property damage\textsuperscript{8}  
▶ Theft of staff money and clinic items (drugs, prescription pads)\textsuperscript{24}  
▶ Patient barricading themselves in a bathroom until demands were met\textsuperscript{24} |
| Physical action with injury (eg, minor cuts and bruises) | ▶ Hit on the head with a walking stick\textsuperscript{32}  
▶ Physical assault\textsuperscript{8} |
| Severe harm (injury requiring hospitalisation, stalking, rape, stabbing, gunshot, murder) | ▶ Stalking\textsuperscript{8}  
▶ Axe attack (on GP)\textsuperscript{24} |

*categories adapted from Hobbs\textsuperscript{28}

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.\textsuperscript{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’.\textsuperscript{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%,\textsuperscript{27} 76%\textsuperscript{8} and 90.1%\textsuperscript{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%\textsuperscript{24} and 99%.\textsuperscript{33} One receptionist from the Australian study by Magin et al\textsuperscript{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,\textsuperscript{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,\textsuperscript{32} stalked\textsuperscript{24} and threatened with a razorblade.\textsuperscript{32} Although the frequency of physical violence was comparatively low, in the study by Parker et al\textsuperscript{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.
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 and medication request refusals, 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 and operational impacts were described in five studies. 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, making the role emotionally laborious. At the time of the aggressive act, most studies reported internalised fear-based responses such as distress, discomfort, panic and “freeze” response, as well as crying and being visibly upset in the reception area soon afterwards. In centres where reception staff relayed test results to patients, receptionists reported feeling anxious about how patients would react. 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’.

Over the longer term, being directly and indirectly exposed to repeated patient aggression was reported to lead to burnout and fatigue, feelings of being inferior and peripheral, self-blame, low self-worth, requiring professional counselling support, disengagement from the work role, discomfort with the gatekeeping role and feeling desensitised to aggression. Receptionists in multiple studies had concerns about receiving and managing future aggression and hostility from patients, and felt psychologically underprepared and unprotected. 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. Operational impacts of patient aggression towards receptionists included staff shortages, difficulties with workforce retention, absenteeism, increased workload for managers to provide training and support to reception staff and adapt to clinic procedures/policies/protocols and increased costs associated with receptionist training, external counselling and installing increased security measures.

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, strategies to mitigate and manage patient aggression were suggested in most studies and trialled in four studies. 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 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. 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.

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. 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. 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. 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. It is therefore

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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. Unfortunately, general practice receptionists appear to experience verbal abuse almost ubiquitously, so frequently that some general practice stakeholders and receptionists accept it as an occupational hazard.

Verbal abuse is common across all workplaces, especially for those receptionists accepting it as an occupational hazard. Verbal abuse is less prevalent than instances of physical violence, reporting figures between 0.5% and 8%. 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. 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, but could put general practice reception staff at increased risk of related adverse psychological impacts.

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

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive</td>
<td>► Designing clinic layout to protect staff&lt;br► Offering a walk-in clinic or provision for same day appointments in scheduling system&lt;br► Regional ‘zero tolerance’ campaign and materials (established as ineffective)&lt;br► Engaging patients positively, smiling, making small talk while patients wait for their appointment&lt;br► High visibility of clinical staff in reception area&lt;br► Reducing frequency of potentially tense points of contact with the receptionists, for example, fewer outbound calls to patients because of better administration systems&lt;br► Use of analysis of patient aggression incidents to inform preventive policy&lt;br► Strategies to ensure consistent messaging to patients about clinic procedures and expectations from reception and clinical staff</td>
</tr>
<tr>
<td>Anticipatory</td>
<td>► Development of formal policy/procedure/protocol/action guides relating to management of patient aggression&lt;br► Practice meetings/deb Briefs/regular receptionists supervision group with receptionist safety and management of patient aggression as regular agenda items&lt;br► Regular staff training for managing patient aggression&lt;br► Employment of receptionists already experienced in managing patient aggression&lt;br► Strategies to enhance staff morale, confidence and trust in management&lt;br► Recording and tracking of aggressive or perceived to be potentially aggressive patients&lt;br► Booking double appointments for patients at higher risk of distress and agitation&lt;br► Clinics designed with ‘safe rooms’ and ‘cool down’ spaces&lt;br► Provision of locks, alarms, barriers, elevated reception desks, clear acrylic shields between receptionists and patients</td>
</tr>
<tr>
<td>Immediate</td>
<td>► Receptionists’ own de-escalation techniques developed through experience, for example, apologising, empathising, listening, providing explanations, advocating for the patient to the doctor, deferring issue to more senior staff&lt;br► Use of personal alarms&lt;br► Active listening skills developed during depression signs identification training&lt;br► 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)&lt;br► Maintain ‘neutral composure’ and ‘contain the spread’ of agitation within the waiting area&lt;br► Calling the police&lt;br► Offering snacks and water to disgruntled patients&lt;br► 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 them</td>
</tr>
<tr>
<td>Reactive</td>
<td>► Removal of patient from practice (ie, they can no longer receive care there)&lt;br► Systems to document, report and analyse incidents of patient aggression&lt;br► Change of procedure in response to an incident of patient aggression&lt;br► Strategies to ensure consistent messaging to patients about clinic procedures and expectations from reception and clinical staff</td>
</tr>
</tbody>
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Strategies established as effective are in bold.
thoughts of leaving the profession,\textsuperscript{24, 32} emotional distress\textsuperscript{7, 8, 16, 17} and even lasting psychological\textsuperscript{15, 18, 23, 29, 32} and physical harm.\textsuperscript{24, 28} These impacts are identical to those reported in other industries, especially hospitality and service industries.\textsuperscript{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.\textsuperscript{37} This potential to significantly affect life outside the workplace suggests potential wide-ranging societal impacts.\textsuperscript{10, 34, 39} Despite the rare case where physical forms of aggression and violence have resulted in serious injury\textsuperscript{28, 32} or even homicide,\textsuperscript{29} 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.\textsuperscript{21, 22, 25} 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.\textsuperscript{32} The study suggested that this could lead to inefficiencies in communicating important health information to patients.\textsuperscript{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’.\textsuperscript{31, 33} In some instances, patients might ‘act out’ in desperation or because of personal or social circumstances\textsuperscript{21, 27} and illnesses\textsuperscript{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.\textsuperscript{40, 41} Further impacts to patient care come from the risk of reduced service capacity as aggression can reduce workforce retention and staffing numbers.\textsuperscript{21, 24, 33}

There are gender imbalances when it comes to the impacts of client-initiated hostility across many industries.\textsuperscript{39, 42} The retail,\textsuperscript{43} hospitality,\textsuperscript{44} and healthcare sector, particularly in reception\textsuperscript{45} and nursing,\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{48} Intentional rule breaking or procrastination.\textsuperscript{32} 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.\textsuperscript{12, 48} The clinic receptionist is already recognised as being one of the lowest ‘prestige’ positions in the general practice workforce,\textsuperscript{13} with little authority,\textsuperscript{26} and the sector is far from achieving gender parity with an extreme over-representation of women.\textsuperscript{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\textsuperscript{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.\textsuperscript{50} In the tourism sector, Boukis et al\textsuperscript{41} 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.\textsuperscript{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.\textsuperscript{38} Interestingly, Dixon et al\textsuperscript{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.\textsuperscript{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.\textsuperscript{55} However, public campaigns are known to be a catalyst for social change and broader public discussion.\textsuperscript{39, 52} Zhou et al found that across hospital literature, public messages suggesting injunctive consequences (eg, ‘hostility can be subject to criminal penalties’) were more
effective in preventing hostility compared with descripti

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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Competing interests DC is an employee of a general practice clinic that experiences the same risk of patient aggression, but he does not work in a patient-facing role. The other authors have no conflicts of interest to declare.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

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Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement All data relevant to the study are included in the article or uploaded as supplementary information.

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REFERENCES


Table S1. Search strategy and terms

<table>
<thead>
<tr>
<th>Database/s</th>
<th>Search strategy used</th>
</tr>
</thead>
<tbody>
<tr>
<td>CINAHL Complete via Ebsco</td>
<td>Title, abstract and keywords: (reception* OR &quot;front desk&quot; OR clerk) AND (&quot;primary care&quot; OR &quot;general practice&quot; OR ambulatory) AND (stress OR hostility OR aggression OR ptsd OR &quot;post-traumatic stress&quot; OR &quot;workplace stress&quot; OR burnout OR &quot;occupational stress&quot; OR &quot;job stress&quot; OR absenteeism OR presenteeism OR &quot;sick leave&quot; OR &quot;self-harm&quot; OR distress OR “mental health”)</td>
</tr>
<tr>
<td>Scopus</td>
<td></td>
</tr>
<tr>
<td>Pubmed</td>
<td></td>
</tr>
<tr>
<td>Healthcare Administration Database</td>
<td></td>
</tr>
<tr>
<td>Google Scholar</td>
<td>Full search strategy would not fit into the Google Scholar search window. Thus, the final search phrase was split into two, with first 10 pages from each search included:</td>
</tr>
<tr>
<td></td>
<td><strong>Search 1:</strong> (reception* OR &quot;front desk&quot; OR clerk) AND (&quot;primary care&quot; OR &quot;general practice&quot; OR ambulatory) AND (stress OR hostility OR aggression OR ptsd OR &quot;post-traumatic stress&quot; OR &quot;workplace stress&quot; OR burnout OR &quot;occupational stress&quot;)</td>
</tr>
<tr>
<td></td>
<td><strong>Search 2:</strong> (reception* OR &quot;front desk&quot; OR clerk) AND (&quot;primary care&quot; OR &quot;general practice&quot; OR ambulatory) AND (&quot;job stress&quot; OR absenteeism OR presenteeism OR &quot;sick leave&quot; OR &quot;self-harm&quot; OR distress OR “mental health”)</td>
</tr>
</tbody>
</table>
### Table S2. Abstract screening guide, inclusion and exclusion criteria

<table>
<thead>
<tr>
<th>Domain</th>
<th>Screening question</th>
<th>Inclusion/Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. LANGUAGE</strong></td>
<td>Is the study published in English language?</td>
<td>• Studies must be published in English language</td>
</tr>
<tr>
<td><strong>2. TYPE</strong></td>
<td>Does the abstract refer to original research of any study design?</td>
<td>Any study design includes:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Quantitative or qualitative study designs, instrument testing (eg survey tools) if responses from relevant types of participants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Excluded:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Guidebooks, training manuals, advice articles, conference discussion proceedings, study protocols, reviews</td>
</tr>
<tr>
<td><strong>3. SETTING</strong></td>
<td>Does the abstract indicate that the research took place in a primary care setting?</td>
<td>Definition of Primary Care Setting: (Derived from AIHW and DoH definitions)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Entry level to the health system, typically first contact an ambulatory individual with a health concern has within the health system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Can include bricks and mortar clinics, mobile/home visiting GP or telehealth services as long as there are reception staff to manage appointment bookings and payments, by phone or electronic means that interact directly with patients and prospective patients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Covers care not related to a hospital visit (ie non-emergency, and any emerging hospital-requiring condition is transferred to a hospital)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Unreferred medical services in Australia, may be shared care arrangements in other nations (eg in UK you are designated your NHS GP, in USA your primary care physician may be determined by your health insurance network)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Care is provided by at least medical practitioners, although often other allied health and nursing staff are available for consultations (if initial care is provided by Indigenous Health Worker, mark as ‘maybe’)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Care provided includes health promotion, prevention, early intervention, treatment of acute conditions, and management of chronic conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Community health centres that allow walk-in consultations (no referral)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• (Dentistry is currently excluded from the scope of this review but note any studies that mention primary care dental clinics as we may need to discuss this in text)</td>
</tr>
</tbody>
</table>
Excluded:

- Urgent Care Centres, Hospitals, emergency care, specialist clinics (eg for medical specialists like cardiologists who need referrals to visit), solely allied health clinics, refugee reception centres, military workforce or prison primary care

### 4. POPULATION

<table>
<thead>
<tr>
<th>Does the abstract indicate that reception staff were participants or considered as relevant factors of the research?</th>
<th>Definition of reception staff:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The paid front line staff in a primary care setting who may undertake the following duties: greeting patients as they arrive, answering phone/email enquiries relating to appointments and billing, administrative tasks such as filing and coding, receiving payment for consultations from primary care patients</td>
</tr>
<tr>
<td></td>
<td>• Reception staff may not have received external training for the role</td>
</tr>
<tr>
<td></td>
<td>• Nurses may sometimes fill reception roles as well as nursing duties at other times, this would be included if the abstract indicated the nurse was engaged in receptionist duties at the time the research related to.</td>
</tr>
</tbody>
</table>

Excluded:

- Administrative staff not in a frontline role (eg back office only)

### 5. PHENOMENA

<table>
<thead>
<tr>
<th>Does the abstract indicate that the research involved investigating the experiences/attitudes/beliefs of reception staff, or conduct/experiences/attitudes/beliefs of patients towards reception staff?</th>
<th>Rationale: although the project is interested specifically in aggression and hostility experienced by reception staff from patients, these factors may be reported as part of other findings and may not appear in the abstracts. The constructs of hostility and aggression should be considered at full text assessment.</th>
</tr>
</thead>
</table>

### DECISION:

<table>
<thead>
<tr>
<th>Should this article be included?</th>
<th>• Yes, all five screening questions answered Yes or Unclear</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• No, at least one answers definitely No</td>
</tr>
</tbody>
</table>
Table S3. Quality assessment results

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Design</th>
<th>Score based on appropriate JBI Critical Appraisal Tool</th>
<th>Overall appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahluwalia, 2005</td>
<td>Qualitative</td>
<td>N Y Y Y N N Y Y Y</td>
<td>70</td>
</tr>
<tr>
<td>Bowie, 2014</td>
<td>Qualitative</td>
<td>N Y Y Y N N Y Y Y</td>
<td>70</td>
</tr>
<tr>
<td>Ceramidas, 2010</td>
<td>Qualitative</td>
<td>N N N Y N Y N Y Y</td>
<td>40</td>
</tr>
<tr>
<td>Hammond, 2013</td>
<td>Qualitative</td>
<td>N Y Y Y Y N N Y Y Y</td>
<td>70</td>
</tr>
<tr>
<td>Magin, 2009</td>
<td>Qualitative</td>
<td>N Y N Y Y N Y Y Y Y</td>
<td>70</td>
</tr>
<tr>
<td>Morrison, 2022</td>
<td>Qualitative</td>
<td>Y Y Y Y Y Y Y Y Y</td>
<td>100</td>
</tr>
<tr>
<td>Naish, 2002</td>
<td>Qualitative</td>
<td>N Y Y Y N N Y Y Y</td>
<td>70</td>
</tr>
<tr>
<td>Parker 2017</td>
<td>Qualitative</td>
<td>N Y Y Y N N Y Y Y</td>
<td>70</td>
</tr>
<tr>
<td>Pina, 2022</td>
<td>Qualitative</td>
<td>Y Y Y Y N Y Y Y Y</td>
<td>90</td>
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<tr>
<td>Strathmann, 2009</td>
<td>Qualitative</td>
<td>Y Y Y Y Y N N Y Y</td>
<td>70</td>
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<tr>
<td>Ward, 2011</td>
<td>Qualitative</td>
<td>N Y Y Y Y N Y Y Y Y</td>
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<tr>
<td>Bayman 2007</td>
<td>Cross-sectional</td>
<td>Y Y N Y Y Y Y Y Y</td>
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<tr>
<td>Herath 2011</td>
<td>Cross-sectional</td>
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<td>75</td>
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<tr>
<td>Hobbs 1991</td>
<td>Cross-sectional</td>
<td>Y Y N N N Y Y N</td>
<td>50</td>
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<tr>
<td>Lopez-Garcia 2018</td>
<td>Cross-sectional</td>
<td>Y Y Y Y Y Y Y Y Y</td>
<td>100</td>
</tr>
<tr>
<td>Sampson 2004</td>
<td>Cross-sectional</td>
<td>Y N N N N N N N</td>
<td>25</td>
</tr>
<tr>
<td>Arber, 1985</td>
<td>Prevalence</td>
<td>Y Y N N Y N Y N Y</td>
<td>67</td>
</tr>
<tr>
<td>Chambers 2006</td>
<td>Prevalence</td>
<td>Y Y N N Y N Y N Y</td>
<td>56</td>
</tr>
<tr>
<td>Dixon 2004</td>
<td>Prevalence</td>
<td>Y Y N Y N Y N Y N</td>
<td>67</td>
</tr>
<tr>
<td>White 2008</td>
<td>Quasi-experimental</td>
<td>Y Y N N N N Y N N</td>
<td>34</td>
</tr>
</tbody>
</table>

Appropriate JBI Critical Appraisal Tool for qualitative\(^1\), cross-sectional\(^2\), prevalence\(^3\), quasi-experimental\(^4\). Qualitative: 10 criteria, Cross-Sectional: 8 criteria, Prevalence: 9, Quasi-experimental: 9. Responses: Yes: Y, No: N

References
### Table S4. Characteristics of studies included in ‘Patient aggression towards receptionists in general practice: a systematic review’

<table>
<thead>
<tr>
<th>Author(s), year of publication</th>
<th>Title</th>
<th>Location, setting</th>
<th>Design, data collection type</th>
<th>Participant characteristics: n, role, gender, age, representativeness</th>
<th>Patient aggression construct (type/impact/strategy)</th>
<th>JBI Score %</th>
<th>Notable Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arber, S and L Sawyer, 1985¹</td>
<td>The role of the receptionist in general practice: a ‘dragon behind the desk’? 1977</td>
<td>United Kingdom (London and South East of England). Multiple primary care practices represented.</td>
<td>Quantitative with some open-ended items. Representative sampling. Structured in-person interviews using non-validated survey instrument.</td>
<td>1000+ community dwelling adults, gender not reported but established as representative of population in region surveyed.</td>
<td>Type 67 Patients who have experienced receptionists as an active intermediary were more likely to report interaction difficulties with receptionists. The survey data lend support to two major findings: (1) that as practices become larger and more complex receptionists operate with more rigid rules, leading to greater hostility expressed by patients towards reception staff; and (2) parents with dependent children and young adults express more antagonism, because they are more likely to experience the receptionist as a ‘gatekeeper’ with whom they need to negotiate to see a doctor for acute care for themselves or for their children.</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Hobbs, F, 1991¹</td>
<td>Violence in general practice: a survey of general practitioners’ views 1989</td>
<td>United Kingdom (West Midlands). Multiple primary care practices represented.</td>
<td>Qualitative, cross-sectional written non-validated survey instrument.</td>
<td>1093 medical staff, 82.3% male, age &lt;35-65 years, broadly representative of workforce.</td>
<td>Type 50 This study investigated violence towards general practitioners but 16% of verbal abuse, 18.7% of verbal abuse with threats and 18.4% of physical aggression occurred in the waiting area which would have been witnessed by or involving PCRs. Of all incidents of violence, 16.4% took place in the waiting area. Frequency of aggression directly towards receptionists and staff was collected but not reported clearly in the article.</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Nash J et al., 2002²</td>
<td>Brief encounters of aggression and violence in primary care: a team approach to coping strategies 2000</td>
<td>United Kingdom (inner and outer London). Multiple primary care practices represented.</td>
<td>Qualitative, interviews and focus groups</td>
<td>74 participants in total with 21 receptionists (9 in interviews and 12 in focus groups). Other participants included practice managers and nursing and medical staff.</td>
<td>Type Strategies 70 Patient aggression was identified as a key issue in primary care with receptionists at particular risk, especially of verbal abuse including ‘screaming and shouting’ which was reported as occurring very frequently. Minimal support was provided to receptionists and they were usually excluded from team meetings. Few practices kept records of incidents. Participants provided recommendations to improve safety including formal record keeping, a practice protocol with regular training, team discussions and improvements to the working environment. Receptionists were also interested in receiving counselling as they felt the practice meetings were not deep enough. Of resolving issues leading to PAH. ‘Yes we try and sort it out between ourselves, if we don’t get any joy like that we often ask the practice manager to come in or a doctor, someone who’s got kind of a bit more authority.’</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>Sampson F et al., 2004³</td>
<td>Why are patients removed from their doctors’ lists? A comparison of patients’ and doctors’ accounts of removal 2000</td>
<td>United Kingdom (England). Multiple primary care practices represented.</td>
<td>Quantitative, cross-sectional survey, using a non-validated survey instrument with some open-ended items.</td>
<td>166 participants in total with 89 medical staff (74% male, mean age 45-66 years) and 77 patients (53% male, mean age 37 years).</td>
<td>Type Strategies 25 Violent, threatening or abusive behaviour was noted as the most common reason for a patient to be removed from a patient list and that it was the medical receptionists who were most often the target of this abuse (81% of incidents). 91% (52 of 57) of incidents of violence included a verbal abuse component. A fifth of patients (15 out of 76, 19.7%) admitted threatening, shouting at, attacking or pushing the doctor, their staff or patients. Violence, threats or abuse were defined as: Threaten or shout at the doctor, practice staff or other patients, Attack or push the doctor, practice staff or other patients, Do any damage to practice property or surgery</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>Dixon CAJ et al, 2004⁴</td>
<td>Abusive behaviour experienced by primary care</td>
<td>United Kingdom (Leeds). Multiple primary care</td>
<td>Quantitative, cross-sectional survey, using a non-validated survey</td>
<td>122 receptionists, 98% female, mean age 45 years (range)</td>
<td>Type 67 The research centred around whether a national ‘zero tolerance’ about violence in primary care campaign had made a difference to PAH. Two thirds (68%) of the receptionists surveyed had experienced verbal abuse in the past year (after the campaign), both on the telephone (60%) and face-to-face (55%). In the year prior to the campaign, 61% had received verbal abuse, 51% face to face and 55% telephone. 14% had experienced a threat of physical abuse in the past year, and 10% in the year prior to that. 4% had experienced physical violence in the past 12 months and 1% in the year prior to that.</td>
<td>0.60</td>
<td></td>
</tr>
</tbody>
</table>

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Fam Med Com Health

Willer F, et al. Fam Med Com Health 2023; 11:e002171. doi: 10.1136/fmch-2023-002171
receptionists: a cross-sectional survey. 2002

practices represented. instrument. Representative sampling. 19-65), 74% British/English; 22% white, 4% country of origin other than the UK.

The perception of the participants was that abuse was higher in the recent past, with the implication that the 'zero tolerance' policy had had no effect on receptionists workplace abuse rates. More economically deprived areas reported experiencing higher rates of abuse.

Strathmann C and M Hay, 2009 Working the Waiting Room. Managing Fear, Hope, and Rage at the Clinic Gate 2003-2005

United States (urban setting). 3 non-referral requiring clinics attached to large medical centre. Qualitative, 204 hour of field observations and unstructured opportunistic interviews 5 receptionists, gender not reported Type Strategies 70

Receptionists were observed to and reported carrying out continuous emotional labour as an important part of their role to mitigate abuse from patients. Verbal abuse (loud speaking and shouting) towards the receptionists, emotional response minimisation from the receptionists and ad hoc de-escalation strategies to calm agitated patients were experienced often during the periods of observation and reported to the authors by receptionist participants. Receptionists reported specifically engaging patients positively, to reduce the opportunity for patient frustration, for example, making positive conversation while they wait.

Adhiwalla S and M O'flyready, 2003 A qualitative study of the impact of the implementation of advanced access in primary healthcare on the working lives of general practice staff ~2004

United Kingdom (South-East England). Six purposively sampled primary care practices represented. Qualitative, semi-structured interviews 18 in total with 6 reception staff. Other participants included GPs and practice managers. Type Impact 70

This study explored the impact on workload and wellbeing of primary care staff of a more responsive appointment scheduling system. Findings from reception staff were reported separately. The change in system resulted in reduction in receptionist stress, easier appointment negotiation with patients, less disclosure of clinical details to receptionists from patients (because the patients could get appointments sooner and didn't have to argue on the basis of condition severity) and fewer perceived incidences of patient frustration and confrontation.

Chambers F. 2008 Violence at work: the experience of general practice receptionists, 2004

Republic of Ireland (two Health Board Areas). Multiple practices represented. Quantitative, cross-sectional survey using non-validated survey instrument, randomised recruitment method. 271 reception staff, 98% female, mean age 38years (range 19-65), 57% were the sole PCR in their practice. Type Impact Strategies 56

Almost all (99%) of participants had experienced verbal abuse, 31% had experienced threats of physical abuse and 6% had experienced actual physical abuse. 18% of participants had experienced greater than 10 incidences of violence during their time as receptionists. In almost all incidents (95%) the perpetrator was a patient. In 34% of episodes of violence no immediate action was taken, in 27% the receptionist received help from other staff, 16% involved police attendance. In 20% of cases, the patient was permanently removed from the patient list and in some cases the patient was reprimanded. Afterwards, 46% reported that no support was provided, 46% indicated that staff had provided emotional support, 5% received in-house de-briefs, managerial support and support from family. 7% took time off work due to workplace violence, 3% received formal counselling. Only 13% had ever received training in managing PAH.


United Kingdom (England), three general practice services. Qualitative, ethnographic, 300hrs of field observations, 50 impromptu unstructured interviews during field observations, 4 semi-structured interviews and 1 group interview. 28 receptionists, 100% female, 23-66 yrs age range Type Impact 80

The role of a GP receptionist was observed to be demanding and involves multiple types of tasks, rituals, regulations and relations. Direct observation of verbal aggression included verbal racial abuse and a patient venting their frustration upon receptionists. In order to perform a caring approach to patients, receptionists sustained their own emotional regulation to one of calm caring (emotional neutrality), despite it being draining to their own underlying emotional state, especially when dealing with hostility from patients. Receptionists report that they felt angry and upset because of the aggression. Receptionists were observed to engage in "emotion switching" whereby they instantly 'matched' or 'managed' the emotional state of the patient eg expressing empathy or joy depending on patient context.

The authors state that ‘GP reception work thus emerges as a complex service role in which the tailoring of one’s own emotions in the management of patient interactions is key.’

White C et al, 2008 Awareness of Depression at the Reception Desk; Education for Primary Care Receptionists

United Kingdom (Lewisham), 22 practices represented. Quantitative, non-randomised experimental study, using non-validated program evaluation 78 reception staff at initial time point, 32 respondents at 12 month follow up characteristics not described. Type Strategies 34

The intervention studied was a depression awareness-raising workshop to assist PCRs to contextualise the signs of depression that they may encounter in their role from patients, such as crying, anger, anxiety, agitation. It was designed to assist PCRs to take a more compassionate view of difficult interactions with patients. Expressions of anger from patients were noted as routine for PCRs. Participants of the training also felt like they were a more respected and integral part of the practice team.

Results included: "[I've learned] to listen more, be more attentive to patients that seem a little distracted or aggressive/nude."
~2006

Survey with some open-ended items. Data collected directly post intervention and at 12 months.

"I realised an angry patient could have been depressed so I did my best to accommodate: very calm and spoke quietly (did not raise voice to match theirs). Later the patient apologised and thanked me for being so caring."

"The patient was angry but I was very sympathetic and able to help get an appointment to suit her which calmed her down."

Bayman P and T Hussain, 2007
Receptionists’ perceptions of violence in general practice.

~2007

Quantitative, cross-sectional using lightly adapted validated survey instruments for types of workplace crime, workplace stress, personality.

207 reception staff, 100% female, mean age 44yrs (range 20-72), 19% employed full-time.

Impact Strategies 88

In the preceding 12 months, 26% of receptionists could recall being threatened by a member of the public while they were at work, and 0.5% had been physically attacked. Staff who felt safe and supported at work (P<0.003) and staff who had lower background sources of stress at work (P<0.001) were less likely to feel they would be threatened or attacked at work. Staff who had received training about violent and abusive incidents felt safer at work [OR 1.27 (1.04,1.55)].

Receptionists who reported having been threatened or attacked in the past 12 months were nearly five times more likely to be worried about being threatened in the future [odds ratio 4.9 (2.0,11.8)] or attacked [OR 4.6 (1.8,11.2)] in the future. 27% were worried about being threatened and 22% were worried about being physically attacked by a member of the public while at work.

37% thought they were likely to be threatened by a member of the public while at work in the next 12 months, but only 7% thought that they were likely to be physically attacked. 29% felt that worrying about being threatened or attacked at work affected their health.

Magin P et al, 2009
Receptionists’ experiences of occupational violence in general practice: a qualitative study and

Australia (Network of Research General Practices), 8 practices

19 interviews and unstructured written responses from 12 additional receptionists and practice managers with past or current receptionist duties, 100% female.

Type Impact Strategies 70

Violence was found to be a common, sometimes pervasive, experience of many receptionists. Verbal abuse, both ‘across the counter’ and telephone abuse was the most prominent form of violence, although other violence, including assault and threats with guns, was reported. Experiences of violence could have marked emotional and psychological effects and could adversely affect job satisfaction, performance and commitment.

“I find that patients are more aggressive towards admin/reception staff than they are to the GPs and nurses. They are the first point of contact and take a lot of abuse and are still expected to remain happy and smiling people.”

“After abusing staff other than the GP, a patient will go into the consult and be their normal self in front of the GP. Often the doctors don’t know about patients’ abusive side.”

In the 2010 paper which focused on environmental factors to mitigate PAH from the same data, perspex barriers and physical lockdown processes in three clinics were universally endorsed by participants working there, but staff from other practices had their concerns that it would undermine the ambience in the clinic.

Hammond J et al, 2013
Slaying the dragon myth: an ethnographic study of receptionists in UK general practice 2009-2011

United Kingdom (north-west of England), 7 primary care sites

Qualitative, ethnographic, 200hrs field observations

45 reception staff

Type Impact Strategies 70

Verbal abuse of receptionists by patients was a common occurrence, particularly relating to appointment booking and requests to patients to disclose clinical issue. Authors concluded that the role of medical receptionists is complex, with many competing demands and they navigate a complex power hierarchy while also trying to protect vulnerable patients and the primary care providers at the site. Although not tested empirically, procedural policy that clarifies clinic operations for patients and procedures that support familiarity and collegiality between clinical and reception staff appear to be able to de-escalate patient aggression and help reception staff feel supported.

Ceremidas D and R Parker, 2010
A response to patient-initiated aggression in general practice: Australian professional medical

Australia

Qualitative using semi-structured interviews.

14 CEOs and presidents of associations and organisations involved with medical care, nursing care, practice

Type Impact Strategies 40

Verbal hostility was described as patients being ‘demanding’ and ‘impatient’ when speaking with reception. Verbal abuse and aggression was reported to be ‘very common’. Verbal abuse of reception staff by patients was characterised as so frequent it should be considered an occupational hazard. ‘Respondents generally perceived that [front desk reception staff] especially women] bore the brunt of aggression in the general practice setting.’ (p254). For the organisation, PAH was perceived as leading to problems with workforce retention and led to decreased capacity to provide service to the community.

Participants volunteered a number of methods that have been used or are being developed to reduce the impact of patient-initiated aggression. However, robust evaluation of these measures appears to be scarce. Overall, participants reported that responses...
organisations face a challenge. 2009-2010

managers and healthcare research. Receptionists not interviewed.

varied in an ad hoc manner depending on the patient and circumstances. Recognition that protections should include harm minimisation strategies (prior and during incidents) and post-incident support.

Parker R et al., 2017a
Patient initiated aggression and violence in the Australian general practice setting [Research institute report] 2009-2010

Australia, 55 primary care practices


78 participants in total, 90% female, 28 receptionists.

Type Impact Strategies

Verbal aggression was reported by many practice staff to be an almost daily occurrence but was not considered as ‘violence’. Less experienced staff, receptionists and administrative workers were more likely to be exposed to aggression compared with more experienced staff such as practice managers and GPs. ‘Frontline’ staff (reception area staff) were far more likely to be exposed to patient aggression on a regular basis than were GPs and more experienced staff.

Many general practice staff claimed that they had never been subject to patient-initiated violence, and then proceeded to relate serious experiences of verbal aggression, intimidation and standover tactics from patients visiting their practice. In addition to raised voices, intimidation and abusive language, a small number of practice staff (typically reception staff) reported that the threatening manner or stance of some patients had caused distress, even though these patients had not become physically violent or abusive, “He came in and he was frightening ... I have never seen such an evil look.”

Reception staff reported that the ability to remain calm and not aggravate or escalate a tense situation was vital. Some reception staff reported having an innate ability to diffuse or otherwise de-escalate an aggressive patient. Other staff seemed to lack this ability and were therefore deemed unsuitable for work in general practice.

Practice staff commonly reported delayed effects of exposure to patient aggression. Some staff reported “going to pieces” shortly after dealing with patient aggression, while other staff did not recognise the impact of the aggressive incident until some months later.

Strategies suggested including employing only reception staff who were experienced in dealing with PAH, dedicated training, physical barriers and alarms, regular staff debriefs and signage.

Herath P et al., 2011
Patient initiated aggression: prevalence and impact for general practice staff 2010

Australia, multiple general practices represented across urban, rural and remote settings.

Quantitative, cross-sectional, clustered sampling to represent urban, rural and remote areas. Non-validated cross-sectional survey.

217 practice managers. No receptionists.

Type Impact Strategies

Verbal aggression towards receptionists was reported as common, physical aggression was infrequent. Staff in larger practices experienced more verbal aggression, property damage and theft. Verbal aggression had a greater negative impact on staff wellbeing than physical aggression. Physical and verbal hostility against receptionists, practice nurses and allied health professionals reported by practice managers. Physical acts of hostility included property damage, theft, physical assault or stalking. There were also reports of sexual harassment. 57% of respondents (practice managers) recognised that verbal aggression against staff caused distress, with 11% reporting counselling was needed and 37% said procedural changes in the practice were required. 14% respondents recognised physical aggression caused staff distress and 3% reporting counselling was needed and 11% said procedural changes in the practice were required. For respondents who have actually experienced physical aggression, 39% reported staff distress, 10% reported requiring staff counselling and 29% said there was a need for procedural change.

Bowie P et al., 2014b
Laboratory test ordering and results management systems: a qualitative study of safety risks identified by administrators in general practice 2012

United Kingdom (Scotland)

Qualitative, using 5 focus groups

40 in total (97.5% female) including 30 reception staff.

Type Impact Strategies

‘Doctor to administrator communication’ and ‘Informing patients of test results’ were identified as two of four safety risk themes. Receptionists reported struggling to communicate results to patients when they had limited background knowledge or familiarity with the terms the doctor had used to communicate the test findings. This then led to frustrating communication difficulties for patients. Emotional reactions towards receptionists from patients included when receptionists delivered ‘bad news’ (unwanted blood test results) for example results that confirmed a new diagnosis, or results that found no abnormalities despite symptoms being experienced by the patient. The authors called for a standardised process to mitigate the safety risks which would include protocols for receptionists providing results.

López-García C et al., 2018
User Violence and Psychological Well-being in Primary 2012

Spain (Region of Murcia, representing 39 primary care clinics

Quantitative, cross-sectional, using validated survey instruments

574 in total (68% female, mean age 49.6yrs, range <35->65yrs) including 148

Type Impact Strategies

Non-clinical staff in primary care settings carried the highest risk of exposure to violence and were routinely exposed to non-physical violence and occasionally exposed to physical violence. ‘Non-physical violence’ collected in the validated survey included ‘the users have even grabbed me or touched me in a hostile way’, ‘users have shoved me, shaken me, or spat at me’, ‘users show their anger at me by breaking doors, windows, walls’, ‘users have attacked me when I was trying to prevent their self-aggression’. ‘Non-physical violence’ collected in this validated survey included ‘users question my decisions’, ‘users blame me for any trifle’, ‘users accuse me unfairly of not fulfilling my obligations,'
Committing errors or complications, 'users make ironic comments to me', 'users get angry with me because of assistential delay', 'users give me dirty or contemptuous looks'. 90.1% of participants experienced this kind of violence. The average frequency of exposure to one of these acts was quarterly and higher than medical and nursing staff. The most frequent events were 'anger for healthcare delay' (~ monthly), 'raise their voice or complain' (~ monthly), 'rude interruptions' (monthly to quarterly).

Exposures to non-physical and physical violence was significantly related to negative psychological variables. Frequency of exposure to non-physical violence was moderately related to emotional exhaustion, somatisation and anxiety and insomnia in the instrument validation study. Physical violence was most related to emotional exhaustion and personalisation. General health score of non-clinical staff was higher than medical and nursing staff but this was not tested directly in relation to frequency of exposure to violent acts.

The participants in this study all recounted frequent experiences of verbal abuse from patients, including the expression of anger, cursing, racial abuse, devaluation and described it as 'part of the job'. The author concluded that receptionists, and particularly those who hold multiple marginalised identities that signal low social status (women, people of colour) are predictable victims of abuse at work.

In this study, receptionists felt powerless to help patients 'they had no autonomy or influence when it came to helping patients get appointments, decreasing their time waiting in the waiting room; they were sure these were the reasons patients were angry with them most of the time' They reported suppressing their feelings in order to retain an 'open demeanor'.

Clinical staff were characterised as reinforcing hierarchy by ignoring the efforts and risk encountered by receptionists ('That door between the waiting room and the back office might as well be made of stone'). Feelings of inferiority, on a background of already feeling like the lowest power people in the primary care hierarchy. Feeling peripheral despite having a central role in the patient experience.

Three thematic blocks were identified as relevant for mitigating the harms of, or reducing, violence from patients to primary care staff: deficits in training or education, the need to strengthen multidisciplinary teams and the patient professional relationship. Actions suggested by participants included training and working to increase the quantity and quality of communication between professionals and the service users.

While data specifically relating to reception staff is not clear due to the reporting being in aggregate with other primary care informants, overall findings indicate that patient-initiated aggression is a common problem. Further, there was confusion over what is considered aggression. Feelings in response to PAH: 'burned out', 'I had no strength there', feeling 'not psychologically prepared' for patient violence, 'unprotected', ‘went home feeling awful’.

PAH: Patient-initiated aggression and/or hostility
Supplementary Materials for: *Patient aggression towards receptionists in general practice: a systematic review* by Willer, Chua and Ball (2023).

Table S1. **Search strategy and terms**

<table>
<thead>
<tr>
<th>Database/s</th>
<th>Search strategy used</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CINAHL Complete via Ebsco</td>
<td>Title, abstract and keywords: (reception* OR &quot;front desk&quot; OR clerk) AND (&quot;primary care&quot; OR &quot;general practice&quot; OR ambulatory) AND (stress OR hostility OR aggression OR ptsd OR &quot;post-traumatic stress&quot; OR &quot;workplace stress&quot; OR burnout OR &quot;occupational stress&quot; OR &quot;job stress&quot; OR absenteeism OR presenteeism OR &quot;sick leave&quot; OR &quot;self-harm&quot; OR distress OR “mental health”)</td>
</tr>
<tr>
<td>• Scopus</td>
<td></td>
</tr>
<tr>
<td>• Pubmed</td>
<td></td>
</tr>
<tr>
<td>• Healthcare Administration Database</td>
<td></td>
</tr>
<tr>
<td>• Google Scholar</td>
<td>Full search strategy would not fit into the Google Scholar search window. Thus, the final search phrase was split into two, with first 10 pages from each search included:</td>
</tr>
<tr>
<td></td>
<td>Search 1: (reception* OR &quot;front desk&quot; OR clerk) AND (&quot;primary care&quot; OR &quot;general practice&quot; OR ambulatory) AND (stress OR hostility OR aggression OR ptsd OR &quot;post-traumatic stress&quot; OR &quot;workplace stress&quot; OR burnout OR &quot;occupational stress&quot;)</td>
</tr>
<tr>
<td></td>
<td>Search 2: (reception* OR &quot;front desk&quot; OR clerk) AND (&quot;primary care&quot; OR &quot;general practice&quot; OR ambulatory) AND (&quot;job stress&quot; OR absenteeism OR presenteeism OR &quot;sick leave&quot; OR &quot;self-harm&quot; OR distress OR “mental health”)</td>
</tr>
</tbody>
</table>
Table S2. Abstract screening guide, inclusion and exclusion criteria

<table>
<thead>
<tr>
<th>Domain</th>
<th>Screening question</th>
<th>Inclusion/Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. LANGUAGE</td>
<td>Is the study published in English language?</td>
<td>• Studies must be published in English language</td>
</tr>
</tbody>
</table>
| 2. TYPE | Does the abstract refer to original research of any study design? | Any study design includes:  
• Quantitative or qualitative study designs, instrument testing (eg survey tools) if responses from relevant types of participants  
Excluded:  
• Guidebooks, training manuals, advice articles, conference discussion proceedings, study protocols, reviews |
| 3. SETTING | Does the abstract indicate that the research took place in a primary care setting? | Definition of Primary Care Setting:  
(Derived from AIHW and DoH definitions)  
• Entry level to the health system, typically first contact an ambulatory individual with a health concern has within the health system  
• Can include bricks and mortar clinics, mobile/home visiting GP or telehealth services as long as there are reception staff to manage appointment bookings and payments, by phone or electronic means that interact directly with patients and prospective patients  
• Covers care not related to a hospital visit (ie non-emergency, and any emerging hospital-requiring condition is transferred to a hospital)  
• Unreferred medical services in Australia, may be shared care arrangements in other nations (eg in UK you are designated your NHS GP, in USA your primary care physician may be determined by your health insurance network)  
• Care is provided by at least medical practitioners, although often other allied health and nursing staff are available for consultations (if initial care is provided by Indigenous Health Worker, mark as ‘maybe’)  
• Care provided includes health promotion, prevention, early intervention, treatment of acute conditions, and management of chronic conditions  
• Community health centres that allow walk-in consultations (no referral)  
• (Dentistry is currently excluded from the scope of this review but note any studies that mention primary care dental clinics as we may need to discuss this in text) |
Excluded:

- Urgent Care Centres, Hospitals, emergency care, specialist clinics (eg for medical specialists like cardiologists who need referrals to visit), solely allied health clinics, refugee reception centres, military workforce or prison primary care

<table>
<thead>
<tr>
<th>4. POPULATION</th>
<th>Definition of reception staff:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the abstract indicate that reception staff were participants or considered as relevant factors of the research?</td>
<td>- The paid front line staff in a primary care setting who may undertake the following duties: greeting patients as they arrive, answering phone/email enquiries relating to appointments and billing, administrative tasks such as filing and coding, receiving payment for consultations from primary care patients</td>
</tr>
<tr>
<td></td>
<td>- Reception staff may not have received external training for the role</td>
</tr>
<tr>
<td></td>
<td>- Nurses may sometimes fill reception roles as well as nursing duties at other times, this would be included if the abstract indicated the nurse was engaged in receptionist duties at the time the research related to.</td>
</tr>
</tbody>
</table>

Excluded:

- Administrative staff not in a frontline role (eg back office only)

<table>
<thead>
<tr>
<th>5. PHENOMENA</th>
<th>Rationale: although the project is interested specifically in aggression and hostility experienced by reception staff from patients, these factors may be reported as part of other findings and may not appear in the abstracts. The constructs of hostility and aggression should be considered at full text assessment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the abstract indicate that the research involved investigating the experiences/attitudes/beliefs of reception staff, or conduct/experiences/attitudes/beliefs of patients towards reception staff?</td>
<td></td>
</tr>
</tbody>
</table>

**DECISION:** Should this article be included?

- Yes, all five screening questions answered Yes or Unclear
- No, at least one answers definitely No
Table S3. Quality assessment results

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Design</th>
<th>Score based on appropriate JBI Critical Appraisal Tool</th>
<th>Overall appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahluwalia, 2005</td>
<td>Qualitative</td>
<td>70 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Bowie, 2014</td>
<td>Qualitative</td>
<td>70 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Ceramidas, 2010</td>
<td>Qualitative</td>
<td>40 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Hammond, 2013</td>
<td>Qualitative</td>
<td>70 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Magin, 2009</td>
<td>Qualitative</td>
<td>70 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Morrison, 2022</td>
<td>Qualitative</td>
<td>70 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Naish, 2002</td>
<td>Qualitative</td>
<td>70 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Parker 2017</td>
<td>Qualitative</td>
<td>70 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Pina, 2022</td>
<td>Qualitative</td>
<td>90 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Strathmann, 2009</td>
<td>Qualitative</td>
<td>70 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Bayman 2007</td>
<td>Cross-sectional</td>
<td>88 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Herath 2011</td>
<td>Cross-sectional</td>
<td>75 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Hobbs 1991</td>
<td>Cross-sectional</td>
<td>50 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Lopez-Garcia 2018</td>
<td>Cross-sectional</td>
<td>100 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Sampson 2004</td>
<td>Cross-sectional</td>
<td>25 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Arber, 1985</td>
<td>Prevalence</td>
<td>67 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Chambers 2006</td>
<td>Prevalence</td>
<td>56 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>Dixon 2004</td>
<td>Prevalence</td>
<td>67 % 'yes'</td>
<td>Included</td>
</tr>
<tr>
<td>White 2008</td>
<td>Quasi-experimental</td>
<td>34 % 'yes'</td>
<td>Included</td>
</tr>
</tbody>
</table>

Appropriate JBI Critical Appraisal Tool for qualitative\(^1\), cross-sectional\(^2\), prevalence\(^3\), quasi-experimental\(^4\). Qualitative: 10 criteria, Cross-Sectional: 8 criteria, Prevalence: 9, Quasi-experimental: 9. Responses: Yes: Y, No: N

References

Table S4. Characteristics of studies included in ‘Patient aggression towards receptionists in general practice: a systematic review’

<table>
<thead>
<tr>
<th>Author/s, year of publication</th>
<th>Title</th>
<th>Year of data collection</th>
<th>Location, setting</th>
<th>Design, data collection type</th>
<th>Participant characteristics: n, role, gender, age, representativeness</th>
<th>Patient aggression construct (type/impact/strategy)</th>
<th>Type</th>
<th>BI Score %</th>
<th>Notable Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arber, S and L Sawyer, 1985*</td>
<td>The role of the receptionist in general practice: a ‘dragon behind the desk’?</td>
<td>1977</td>
<td>United Kingdom (London and South East of England), Multiple primary care practices represented.</td>
<td>Quantitative with some open-ended items. Representative sampling. Structured in-person interviews using non-validated survey instrument.</td>
<td>1000+ community dwelling adults, gender not reported but established as representative of population in region surveyed.</td>
<td>Type</td>
<td>67</td>
<td></td>
<td>Patients who have experienced receptionists as an active intermediary were more likely to report interaction difficulties with receptionists. The survey data lend support to two major findings: (1) that as practices become larger and more complex receptionists operate with more rigid rules, leading to greater hostility expressed by patients towards reception staff; and (2) parents with dependent children and young adults express more antagonism, because they are more likely to experience the receptionist as a ‘gatekeeper’ with whom they need to negotiate to see a doctor for acute care for themselves or for their children.</td>
</tr>
<tr>
<td>Hobbs, F, 1991†</td>
<td>Violence in general practice: a survey of general practitioners’ views</td>
<td>1989</td>
<td>United Kingdom (West Midlands), Multiple primary care practices represented.</td>
<td>Qualitative, cross-sectional using written non-validated survey instrument.</td>
<td>1093 medical staff, 82.3% male, age &lt;35- &gt;65 years, broadly representative of workforce.</td>
<td>Type</td>
<td>50</td>
<td></td>
<td>This study investigated violence towards general practitioners but 16% of verbal abuse, 18.7% of verbal abuse with threats and 18.4% of physical aggression occurred in the waiting area which would have been witnessed by or involving PCRs. Of all incidents of violence, 16.4% took place in the waiting area. Frequency of aggression directly towards receptionists and other staff was collected but not reported clearly in the article.</td>
</tr>
<tr>
<td>Naish J et al., 2002‡</td>
<td>Brief encounters of aggression and violence in primary care: a team approach to coping strategies</td>
<td>2000</td>
<td>United Kingdom (inner and outer London), Multiple primary care practices represented.</td>
<td>Qualitative, interviews and focus groups.</td>
<td>74 participants in total with 21 receptionists (9 in interviews and 12 in focus groups). Other participants included practice managers and nursing and medical staff.</td>
<td>Type Strategies</td>
<td>70</td>
<td></td>
<td>Patient aggression was identified as a key issue in primary care with receptionists at particular risk, especially of verbal abuse including ‘screaming and shouting’ which was reported as occurring very frequently. Minimal support was provided to receptionists and they were usually excluded from team meetings. Few practices kept records of incidents. Participants provided recommendations to improve safety including formal record keeping, a practice protocol with regular training, team discussions and improvements to the working environment. Receptionists were also interested in receiving counselling as they felt the practice meetings were not deep enough. Of resolving issues leading to PAH: “Yes we try and sort it out between ourselves, if we don’t get any joy like that we often ask the practice manager to come in or a doctor, someone who’s got kind of a bit more authority.”</td>
</tr>
<tr>
<td>Sampson F et al., 2003‡</td>
<td>Why are patients removed from their doctors’ lists? A comparison of patients’ and doctors’ accounts of removal</td>
<td>2000</td>
<td>United Kingdom (England), Multiple primary care practices represented.</td>
<td>Quantitative, cross-sectional survey, using a non-validated survey instrument with some open-ended items.</td>
<td>166 participants in total with 89 medical staff (74% male, mean age 45 years) and 77 patients (53% male, mean age 37 years).</td>
<td>Type Strategies</td>
<td>25</td>
<td></td>
<td>Violent, threatening or abusive behaviour was noted as the most common reason for a patient to be removed from a patient list and that it was the medical receptionists who were most often the target of this abuse (81% of incidents). 91% (52 of 57) of incidents of violence included a verbal abuse component. A fifth of patients (15 out of 76, 19.7%) admitted threatening, shouting at, attacking or pushing the doctor, their staff or patients. Violence, threats or abuse were defined as: Threaten or shout at the doctor, practice staff or other patients, Attack or push the doctor, practice staff or other patients, Do any damage to practice property or surgery</td>
</tr>
<tr>
<td>Dixon CAJ et al, 2004‡</td>
<td>Abusive behaviour experienced by primary care</td>
<td></td>
<td>United Kingdom (Leeds), Multiple primary care</td>
<td>Quantitative, cross-sectional survey, using a non-validated survey</td>
<td>122 receptionists, 98% female, mean age 45 years (range)</td>
<td>Type</td>
<td>67</td>
<td></td>
<td>The research centred around whether a national ‘zero tolerance’ about violence in primary care campaign had made a difference to PAH. Two thirds (68%) of the receptionists surveyed had experienced verbal abuse in the past year (after the campaign), both on the telephone (60%) and face-to-face (55%). In the year prior to the campaign, 61% had received verbal abuse, 51% face to face and 55% telephone. 14% had experienced a threat of physical abuse in the past year, and 10% in the year prior to that. 4% had experienced physical violence in the past 12 months and 1% in the year prior to that.</td>
</tr>
</tbody>
</table>
Supplemental material

2002
receptionists: a cross-sectional survey.

practices represented. instrument. Representative sampling.
19-65), 74% British/ English; 22% white, 4% country of origin other than the UK. The perception of the participants was that abuse was higher in the recent past, with the implication that the 'zero tolerance' policy had had no effect on receptionists workplace abuse rates. More economically deprived areas reported experiencing higher rates of abuse.

2003-2005
Gate
Strathmann C and M Hay, 2009

Working the Waiting Room: Managing Fear, Hope, and Rage at the Clinic Gate

United States (urban setting), 3 non-referral requiring clinics attached to large medical centre. Qualitative, 204hour of field observations and unstructured opportunistic interviews 5 receptionists, gender not reported Type Strategies 70 Receptionists were observed to and reported carrying out continuous emotional labour as an important part of their role to mitigate abuse from patients. Verbal abuse (loud speaking and shouting) towards the receptionists, emotional response minimisation from the receptionists and ad hoc de-escalation strategies to calm agitated patients were experienced often during the periods of observation and reported to the authors by receptionist participants. Receptionists reported specifically engaging patients positively, to reduce the opportunity for patient frustration, for example, making positive conversation while they wait.

~2004
Adhikwalla S and M O'Reidy, 2005

A qualitative study of the impact of the implementation of advanced access in primary healthcare on the working lives of general practice staff

United Kingdom (South-East England) Six purposively sampled primary care practices represented. Qualitative, semi-structured interviews 18 in total with 6 reception staff. Other participants included GPs and practice managers. Type Impact 70 This study explored the impact on workload and wellbeing of primary care staff of a more responsive appointment scheduling system. Findings from reception staff were reported separately. The change in system resulted in reduction in receptionist stress, easier appointment negotiation with patients, less disclosure of clinical details to receptionists from patients (because the patients could get appointments sooner and didn't have to argue on the basis of condition severity) and fewer perceived incidences of patient frustration and confrontation.

2004
Chambers F. 2008

Violence at work: the experience of general practice receptionists,

Republic of Ireland (two Health Board Areas). Multiple practices represented. Quantitative, cross-sectional survey using non-validated survey instrument, randomised recruitment method. 271 reception staff, 98% female, mean age 38 years (range 19-65), 57% were the sole PCR in their practice. Type Impact Strategies 56 Almost all (99%) of participants had experienced verbal abuse, 31% had experienced threats of physical abuse and 6% had experienced actual physical abuse. 18% of participants had experienced greater than 10 incidences of violence during their time as receptionists. In almost all incidents (95%) the perpetrator was a patient. In 34% of episodes of violence no immediate action was taken, in 27% the receptionist received help from other staff, 16% involved police attendance. In 20% of cases, the patient had already removed from the patient list and in some cases the patient was imprisoned. Afterwards, 46% reported that no support was provided, 46% indicated that staff had provided emotional support, 5% received in-house de-briefs, management support and support from family. 7% took off work due to workplace violence, 3% received formal counselling. Only 13% had ever received training in managing PAH.

2005-2008
Ward J and R McMuray, 2011

The unspoken work of general practitioner receptionists: A re-examination of emotion management in primary care

United Kingdom (England), three general practice services. Qualitative, ethnographic, 300hrs of field observations, 50 impromptu unstructured interviews during field observations, 4 semi-structured interviews and 1 group interview. 28 receptionists, 100% female, 26-66 yrs age range Type Impact 80 The role of a GP receptionist was observed to be demanding and involves multiple types of tasks, rituals, regulations and relations. Direct observation of verbal aggression included verbal racial abuse and a patient venting their frustration upon receptionists. In order to perform a calming approach to patients, receptionists sustained their own emotional regulation to one of calm caring (emotional neutrality), despite it being draining to their own underlying emotional state, especially when dealing with hostility from patients. Receptionists report that they felt angry and upset because of the aggression. Receptionists were observed to engage in 'emotion switching' whereby they instantly 'matched' or 'managed' the emotional state of the patient eg expressing empathy or joy depending on patient context.

The authors state that ‘GP reception work thus emerges as a complex service role in which the tailoring of one’s own emotions in the management of patient interactions is key’.

2008
White C et al., 2008

Awareness of Depression at the Reception Desk: Education for Primary Care Receptionists

United Kingdom (Lewisham), 22 practices represented. Quantitative, non-randomised experimental study, using non-validated program evaluation 78 reception staff at initial time point, 32 respondents at 12 month characteristics not described. Type Strategies 34 The intervention studied was a depression awareness-raising workshop to assist PCRs to contextualise the signs of depression that they may encounter in their role from patients, such as crying, anger, anxiety, agitation. It was designed to assist PCRs to take a more compassionate view of difficult interactions with patients. Expressions of anger from patients were noted as routine for PCRs. Participants of the training also felt like they were a more respected and integral part of the practice team.

Results included: “[I’ve learned] to listen more, be more attentive to patients that seem a little distracted or aggressive/rude.”
In the 2010 paper which focussed on environmental factors to mitigate PAH from the same data, perspex barriers and physical lockdown processes in three clinics were universally endorsed by participants working there, but staff from other practices had thought they were likely to be physically attacked. 29% felt that worrying about being threatened or attacked at work affected their health.

Violence was found to be a common, sometimes pervasive, experience of many receptionists. Verbal abuse, both ‘across the counter’ and telephone abuse was the most prominent form of violence, although other violence, including assault and threats with guns, was reported. Experiences of violence could have marked emotional and psychological effects and could adversely affect job satisfaction, performance and commitment.

“After abusing staff [at the practice], I felt extremely stupid. I should have known it was going to happen.”

In the 2010 paper which focussed on environmental factors to mitigate PAH from the same data, perspex barriers and physical lockdown processes in three clinics were universally endorsed by participants working there, but staff from other practices had thought they were likely to be physically attacked. 29% felt that worrying about being threatened or attacked at work affected their health.
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Study Title</th>
<th>Setting</th>
<th>Participants</th>
<th>Type</th>
<th>Impact</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>López-García C et al, 2018</td>
<td>User Violence and Psychological Well-being in Primary Care Practices</td>
<td>Spain (Region of Murcia), representing 39 primary care clinics</td>
<td>Qualitative, cross-sectional, using validated survey instruments</td>
<td>574 in total (68% female, mean age 49.69ys, range &lt;35-&gt;65yrs) including 148</td>
<td>Type</td>
<td>Impact</td>
<td>Strategies</td>
</tr>
<tr>
<td>Bowie P et al, 2014</td>
<td>Laboratory test ordering and results management systems: a qualitative study of safety risks identified by administrators in general practice</td>
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<td>Type</td>
<td>Impact</td>
<td>Strategies</td>
</tr>
</tbody>
</table>

Verbal aggression was reported by many practice staff to be an almost daily occurrence but was not considered as ‘violence’. Less experienced staff, receptionists and administrative workers were more likely to be exposed to aggression compared with more experienced staff such as practice managers and GPs. ‘Frontline’ staff (reception area staff) were far more likely to be exposed to patient aggression on a regular basis than were GPs and more experienced staff.

Many general practice staff claimed that they had never been subject to patient-initiated violence, and then proceeded to relate serious experiences of verbal aggression, intimidation and standover tactics from patients visiting their practice. In addition to raised voices, intimidation and abusive language, a small number of practice staff (typically reception staff) reported that the threatening manner or stance of some patients had caused distress, even though these patients had not become physically violent or abusive, “He came in and he was frightening ... I have never seen such an evil look.”

Reception staff reported that the ability to remain calm and not aggravate or escalate a tense situation was vital. Some reception staff reported having an innate ability to diffuse or otherwise de-escalate an aggressive patient. Other staff seemed to lack this ability and were therefore deemed unsuitable for work in general practice.

Practice staff commonly reported delayed effects of exposure to patient aggression. Some staff reported “going to pieces” shortly after dealing with patient aggression, while other staff did not recognise the impact of the aggressive incident until some months later.

Strategies suggested including employing only reception staff who were experienced in dealing with PAH, dedicated training, physical barriers and alarms, regular staff debriefs and signage.

Non-clinical staff in primary care settings carried the highest risk of exposure to violence and were routinely exposed to non-physical violence and occasionally exposed to physical violence. 'Physiological violence' collected in the validated survey included 'the users have even grasped me or touched me in a hostile way', 'users have shoved me, shaken me, or spat at me', 'users show their anger at me by breaking doors, windows, walls', 'users have attacked me when I was trying to prevent their self-agression'. 'Non-physical violence' collected in this validated survey included 'users question my decisions', 'users blame me for any trifles', 'users accuse me unfairly of not fulfilling my obligations, varied in an ad hoc manner depending on the patient and circumstances. Recognition that protections should include harm minimisation strategies (prior and during incidents) and post-incident support.
<table>
<thead>
<tr>
<th>Source</th>
<th>Methodology</th>
<th>Setting</th>
<th>Participants</th>
<th>Type</th>
<th>Impact</th>
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<tbody>
<tr>
<td>Ruiz-Hernández J et al, 2016</td>
<td>Evaluation of the users violence in primary health care: Adaptation of an instrument</td>
<td>United States (California), three medical practices</td>
<td>6 receptionists, 100% female, under 50 years old and Mexican American</td>
<td>Qualitative, phenomenology, using semi-structured interviews</td>
<td>10</td>
</tr>
<tr>
<td>Morrison E, 2022</td>
<td>Reconstructing the Role of the Medical Receptionist: A Phenomenological Exploration of the Experiences of Women Who Work as Reception Staff in Medical Offices</td>
<td>Spain (Health District of Murcia), multiple sites</td>
<td>44 in total (68.2% female, mean age 50.3yrs, range 38-64), up to 8 medical receptionists represented.</td>
<td>Qualitative, using focus groups</td>
<td>90</td>
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</table>

Committing errors or complications, 'users make ironic comments to me', 'users get angry with me because of assisitential delay', 'users give me dirty or contemptuous looks'. 90.1% of participants experienced this kind of violence. The average frequency of exposure to one of these acts was quarterly and higher than medical and nursing staff. The most frequent events were 'anger for healthcare delay' (~ monthly), 'raise their voice or complain' (~ monthly), 'rude interruptions' (monthly to quarterly).

Exposures to non-physical and physical violence was significantly related to negative psychological variables. Frequency of exposure to non-physical violence was moderately related to emotional exhaustion, somatisation and anxiety and insomnia in the instrument validation study. Physical violence was most related to emotional exhaustion and personalisation. General health score of non-clinical staff was higher than medical and nursing staff but this was not tested directly in relation to frequency of exposure to violent acts.

The participants in this study all recounted frequent experiences of verbal abuse from patients, including the expression of anger, cursing, racial abuse, devaluation and described it as 'part of the job'. The author concluded that receptionists, and particularly those who hold multiple marginalised identities that signal low social status (women, people of colour) are predictable victims of abuse at work.

In this study, receptionists felt powerless to help patients 'they had no autonomy or influence when it came to helping patients get appointments, decreasing their time waiting in the waiting room; they were sure these were the reasons patients were angry with them most of the time' They reported suppressing their feelings in order to retain an ‘open demeanor’.

Clinical staff were characterised as reinforcing hierarchy by ignoring the efforts and risk encountered by receptionists ("That door between the waiting room and the back office might as well be made of stone"). Feelings of inferiority, on a background of already feeling like the lowest power people in the primary care hierarchy. Feeling peripheral despite having a central role in the patient experience.

Three thematic blocks were identified as relevant for mitigating the harms of, or reducing, violence from patients to primary care staff: deficits in training or education, the need to strengthen multidisciplinary teams and the patient professional relationship. Actions suggested by participants included training and working to increase the quantity and quality of communication between professionals and the service users.

While data specifically relating to reception staff is not clear due to the reporting being in aggregate with other primary care informants, overall findings indicate that patient-initiated aggression is a common problem. Further, there was confusion over what is considered aggression. Feelings in response to PAH: 'burned out', 'I had no strength there', feeling 'not psychologically prepared' for patient violence, 'unprotected', 'went home feeling awful'.

PAH: Patient-initiated aggression and/or hostility