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# Consumer satisfaction with practice nursing: a cross-sectional survey in New Zealand general practice

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## Abstract

An important consideration in health service delivery is ensuring that services meet consumer needs. Whilst nursing services in primary care have grown internationally, there has been limited exploration of consumer satisfaction with these services. This paper reports a descriptive survey that sought to evaluate consumers' perceptions of New Zealand practice nurses (PNs). One thousand, five hundred and five patients who received nursing services at one of 20 participating New Zealand general practices completed a survey tool between December 2010 and December 2011. The 64-item self-report survey tool contained the 21-item General Practice Nurse Satisfaction (GPNS) scale. Data were analysed using both descriptive and inferential statistics. Internal consistency of the GPNS scale was high (Cronbach's  $\alpha$  0.97). Participants aged over 60 years and those of European descent were significantly less satisfied with the PN ( $P = 0.001$ ). Controlling for these characteristics, participants who had visited the PN more than four times previously were 1.34 times (adjusted odds ratio 1.34 (95% CI: 1.06-1.70) more satisfied than the comparison group (up to 4 previous visits to PN). In addition to the further validation of the psychometric properties of the GPNS scale in a different setting, the study also revealed a high level of satisfaction with PNs, with increased satisfaction with an increased number of visits. Nevertheless, the lower levels of satisfaction with PNs in the older age group as well as those of European descent, warrants further examination. The study also highlights the need for PNs and consumers to discuss consumer's expectations of services and create a shared understanding of treatment goals.

## Disciplines

Medicine and Health Sciences | Social and Behavioral Sciences

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# **Consumer satisfaction with practice nursing: A cross-sectional survey in New Zealand general practice**

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**Keywords:** consumer satisfaction, survey, primary care nursing, office nurse

## **Abstract**

An important consideration in health service delivery is ensuring that services meet consumer needs. Whilst nursing services have grown in primary care internationally, there has been limited exploration of consumer satisfaction with these services. This paper reports a descriptive survey which sought to evaluate consumers' perceptions of New Zealand practice nurses (PN). 1505 patients who received nursing services at one of 20 participating New Zealand general practices completed a survey tool between December 2010 - December 2011. The 64-item self-report survey tool contained the 21-item General Practice Nurse Satisfaction scale. Data were analysed using both descriptive and inferential statistics. Internal consistency of the GPNS scale was high (Cronbach's alpha 0.97). Participants aged over 60 years and those of European descent were significantly less satisfied with the PN ( $p=0.001$ ). Controlling for these characteristics, participants who had visited the PN more than four times previously were 1.34 times (adjusted odds ratio 1.34 (95% CI: 1.06 to 1.70) more satisfied than the comparison group (up to 4 previous visits to PN). In addition to the further validation of the psychometric properties of the GPNS scale in a different study setting, the study also revealed a high level of satisfaction with PNs, with increased satisfaction with an increased number of visits. Nevertheless, the lower levels of satisfaction with PNs in the older age group, as well as those of European descent warrants further examination. The study also highlights the need for practice nurses and consumers to discuss consumer's expectations of services and create a shared understanding of treatment goals.

**What is known about the topic?**

Nursing in primary care is conceptually alluring to enhance service delivery and increase the range of services available in primary care. Consumer satisfaction is linked to improved compliance with therapeutic regimes and improved health outcomes. There has been limited evaluation of consumer satisfaction with nursing services in general practice.

**What does this paper add?**

This paper quantifies consumer satisfaction with general practice nurses, providing evidence for the acceptability of the role to consumers. It provides evidence of a link between changing health status and number of practice nurse visits and consumer satisfaction. This paper highlights the importance of communication and shared goal setting between practice nurses and patients to maintain high levels of satisfaction.

## **Introduction**

Internationally, the rise in chronic and complex disease is increasing the emphasis on primary care as a means of managing individuals within the community (Wilson, 2000). In New Zealand long term conditions absorb 70% of all health care spending and lead to 80% of all deaths (National Health Committee., 2007). The New Zealand health sector has traditionally focused primarily on medical needs, and this is very important for those who are unwell, however a complex range of clinical, social, cultural and economic factors affect an individual's health status, and to address these social determinants of health requires collaborative efforts with a wider range of providers and agencies. There is growing recognition of the effectiveness of multidisciplinary teams in chronic disease management (Wilson, 2000). This has prompted the development of nursing services within the primary care sector and, specifically, within general practice. Despite the growth of the PN role in New Zealand, there is limited published literature evaluating nurse-led care in this setting (Hoare, Mills, & Francis, 2012).

Similar to Australia, New Zealand has a publicly funded health system (Pullon, McKinlay, & Dew, 2009). District Health Boards (DHB) facilitate funding and planning of health services to meet local population needs. Each DHB receives funding based on the size and demographics of the population that they serve and the historical use of health services in the area. The DHBs subsequently fund Primary Health Organisations (PHOs) to deliver general practice services. Whilst capitation funding is provided to lower the cost of general practice visits, as small businesses, general practices can still set their own fees for any services provided by the practice (Hoare, et al., 2012).

### *Consumer satisfaction*

To facilitate consumer empowerment, the consumer perspective of health service provision is becoming increasingly recognised as an important factor in health system design and service evaluation (Andrew, Salamonson, Everett, Halcomb, & Davidson, 2011; Cheraghi-Sohi et al., 2006; Potiriadis et al., 2008). Consumer satisfaction can be defined as the contrast between what the consumer perceives to be ideal care and the care that they actually receive from their health provider (Merkouris, Papathanassoglou, & Lemonidou, 2004). Understanding consumer satisfaction allows health professionals and policymakers to respond to patient preferences and design services that are acceptable and meet the needs of the community (Cheraghi-Sohi, et al., 2006). Through this process consumers are empowered to take some ownership over the health system and the services that it delivers. Measurement of consumer satisfaction in general practice is not new. Numerous scales have been developed to explore consumers' experiences in the broad context of general practices (Campbell et al., 2009; Potiriadis, et al., 2008; Poulton, 1996). These scales, however, predominately focus on the general practitioner and practice organisation and access, and contain few, if any, items that explore satisfaction with the practice nurse (Baker, 1990; Grogan, Conner, Norman, Willits, & Porter, 2000; Kinnersley, Stott, Peters, Harvey, & Hackett, 1996; Laurant et al., 2008; Williams, Weinman, Dale, & Newman, 1995; Williams & Calnan, 1991).

### *Satisfaction with general practice nursing*

Internationally, limited research has been undertaken to explore consumer perceptions of nursing in general practice (Desborough, Banfield, & Parker, 2013; Halcomb, Caldwell, Salamonson, & Davidson, 2011; Hegney et al., 2004a; Hegney, Price, Patterson, Martin-McDonald, & Rees, 2004c; Redsell, Stokes, Jackson, Hastings, & Baker, 2007). Several studies have identified consumer support for the

general practice nurse role in the Australian context (Cheek et al., 2002; Hegney et al., 2004b). However, in these investigations, many participants were describing how they thought they would feel about receiving services from a nurse as they had not received practice nurse services previously. Despite their significant roles in health service delivery, there is no literature from the UK or New Zealand that specifically reports consumer satisfaction with nurses in general practice. Additionally, much of the literature that does report studies on consumer satisfaction with nursing in general practice is actually becoming quite dated (Halcomb, et al., 2011; Hegney, et al., 2004a; Hegney, et al., 2004c; 2012; Redsell, et al., 2007).

In Australia, two studies have looked at consumer satisfaction with nursing in general practice as part of broader investigations (Desborough, et al., 2013; Mahomed, 2012). As part of the evaluation of a practice nurse-led chronic disease intervention, Mahomed et al. (2012) developed a grounded theory of patient satisfaction with practice nurse-led care for those with chronic disease. This theory identified a cyclical process through which patients “navigated care”. It described how consumers who did not adequately participate in determining care needs, those who did not form relationships or those who had less confidence were less likely to remain in practice nurse-led care (Mahomed, 2012).

Additionally, Desborough et al. (2013) have recently developed a survey tool to evaluate the satisfaction and enablement of patients who receive nursing care in Australian general practices. The final version of this tool comprised 20 items, 15 exploring satisfaction and 5 specific to enablement. Whilst this tool has been validated, satisfaction data are yet to be published.

In 2009, a tool was developed and validated in the Australian context to specifically explore consumer satisfaction with practice nurses (Halcomb, et al., 2011). Given the



health policy environment within New Zealand which places increasing emphasis on nursing services, it was considered timely to use this tool in the New Zealand setting to explore patient perceptions of practice nurses. This paper reports on a study that sought to understand the relationship between consumer demographics and their satisfaction with practice nurse services.

## **Methods**

### ***Study Design***

This study reports on a descriptive survey undertaken as part of a mixed methods investigation of consumer satisfaction with practice nurses. The qualitative data from this larger study has been reported elsewhere (Halcomb, Peters, & Davies, 2013).

### ***Sample***

The New Zealand College of Primary Health Care Nurses (NZCPHCN)(formerly College of Practice Nurses), New Zealand Nurses Organisation (NZNO) recruited practice nurses and their practices via a call for expressions of interest in the project sent to members via email. Once practices were recruited, consecutive consumers receiving practice nurse services were provided a survey tool following their consultation by the practice administration staff. Consumers were included if they read sufficient English to complete the survey form and were able to provide informed consent to participate.

### ***Survey tool***

The survey tool was developed from previous work to assess satisfaction with practice nursing services in the Australian context (Halcomb, et al., 2011). The survey consisted of 64-items; 21-items collected data regarding participant

demographics and their relationship with the practice, 22-items explored the consumers perceived health status and 21-items comprised the GPNS scale (Figure 1)(Halcomb, et al., 2011). The GPNS scale asks the consumer to rate statements about various aspects of their satisfaction on a 5-point Likert scale. The internal consistency of the GPNS scale was calculated using Cronbach's alpha.

Given the cultural and systems differences, the tool was reviewed by both expert general practice nurses from New Zealand and Maori health professionals to ensure that it was appropriately adapted for the New Zealand context. Face validity in the New Zealand context was assessed by a group of practice nurses from NZCPHCN who reviewed the tool and suggested modifications prior to survey administration.

\*\*\**INSERT FIGURE 1 HERE*\*\*\*

### ***Data collection***

Each practice nurse participant completed a demographic form, providing information about both themselves and the general practice in which they were employed. Survey forms were then provided to consecutive consumers who received nursing services from the participating practice nurse during the study period (December 2010-December 2011). These consumers were selected as they had the experience of receiving services from a PN. Consumers completed the forms in the general practice and placed them in a sealed box that was returned to the study co-ordinator. A sub-group of consumers also participated in semi-structured telephone interviews. These interview data are reported elsewhere (Halcomb, et al., 2013).

### ***Data analysis***

Consumer survey forms were imported into the Statistical Package for the Social Sciences (SPSS™), while data on the demographics of the practice nurse were

entered manually into SPSS™ Version 19.0. Survey data was analysed using descriptive statistics (i.e. frequencies, percentages). The internal consistency of the GPNS scale was calculated using Cronbach's alpha. As the GPNS scale scores were not normally distributed, the scores were divided at the median, to represent the low (up to 90) and high (>90) PN satisfaction groups. Using the low and high PN satisfaction groups as the outcome variable, seven socio-demographic variables that were statistically significant in the chi-square test were used as predictor variables for the multivariate logistic regression analysis. Statistical significance was set at  $p < 0.05$ .

### ***Ethical considerations***

A plain language information sheet was attached to the front of the survey. Survey completion implied participant consent. This study was approved by the University of Western Sydney Human Research Ethics Committee. Written confirmation was sought from the New Zealand Ministry of Health to confirm that this project was exempt from ethical approval based on the clause 11.11 "Ethics committee review is not required for an innocuous questionnaire".

## **Results**

### ***Practice & Practice Nurse Participants***

Of the 28 practices who volunteered to participate in the study, nurse demographic and consumer satisfaction data was received from 20 practices (response rate: 71.4%). Within these practices, 89 practice nurses returned the survey of their demographic data and consumer surveys. Practices employed between 1 and eleven nurses (Mean: 4.45; *SD*: 3.15). Most participating Practices were located in Urban ( $n=14$ ; 70%) rather than Urban / Rural ( $n=4$ ; 20%) areas.

All participating nurses were female. The nurses' mean age was 48.97 years (Range: 21.0-65 years; *SD*: 9.49). Whilst 13 (14.61%) participants had been employed as a nurse for 10 years or less, participants had a mean of 22.28 years of nursing experience. Twenty-five (28.10%) nurses had over 30 years nursing experience. Eighty-one (91%) participants were employed as Registered Nurses, with others employed as Nurse Managers ( $n=4$ ; 5%); Clinical Nurse Specialists ( $n=2$ ; 2%); Nurse Practitioner ( $n=1$ ; 1%); and Enrolled Nurse ( $n=1$ ; 1%).

Participants had been employed in general practice for a mean of 11.37 years. Nurse participants reported having only worked in a mean of 2.25 practices in their career. Participants reported being employed for between 8 and 44 hours per week (mean: 27.66; *SD*: 9.01).

### ***Consumer Participants***

A total of 1505 consumers completed the survey. The demographics of consumers is presented in Table 1. Practices varied significantly in terms of the numbers of consumers recruited, with a mean of between 6.7-73.0 consumers recruited per participating practice nurse (mean: 16.9; *SD*: 22.0).

\*\*\*INSERT TABLE 1 HERE\*\*\*

Most consumer participants were the patient themselves ( $n=1308$ ; 86.9%), had made an appointment with the practice nurse ( $n=1018$ ; 67.6%) and expected to see a practice nurse on their visit today ( $n=1235$ ; 82.1%). Other participants were the parent of a child patient ( $n=141$ ; 9.4%), the carer of an adult patient ( $n=16$ ; 1.1%), or on behalf of an adult patient ( $n=16$ ; 1.1%). There was a wide variation in the number of times that participants had seen the practice nurse previously, with 29.3% ( $n=441$ ) having seen a practice nurse more than 12 times previously and 22.1% ( $n=332$ ) having seen a practice nurse on 2 or less occasions previously. During their visit, most patients saw only the practice nurse ( $n=917$ ; 60.9%).

Most participants strongly agree that it was easy to make an appointment with the Practice Nurse at a time that suited them ( $n=1158$ ; 76.9%) and quickly when it was required ( $n=974$ ; 64.7%).

Most consumers consulted the practice nurse for a vaccination ( $n=669$ ), with others attending for an ongoing problems ( $n=266$ ), general check-up ( $n=246$ ) or follow-up from previous visit ( $n=219$ ). The procedures undertaken by nurses during the visits are described in Figure 2.

\*\*\*INSERT FIGURE 2 HERE\*\*\*

### **Reliability of the General Practice Nurse Satisfaction (GPNS) scale**

The Cronbach's alpha of the 21-item GPNS scale was 0.97, confirming the high level of internal consistency of the scale.

The overall mean satisfaction score of the GPNS was 82.47 (SD: 23.75). Results of the bivariate group comparison (Figure 3) show that consumers aged over 60 years and those of European descent were less satisfied with their encounters with practice

nurses than those aged under 60 years and of non-European descent ( $p<0.001$ ). However, those who had visited the PN more than four times previously ( $p=0.031$ ) or who were currently in paid employment were significantly more satisfied ( $p=0.012$ ).

\*\*\*INSERT FIGURE 3 HERE\*\*\*

### **Predictors of high PN satisfaction**

Logistic regression analysis was used to uncover the socio-demographic predictors of high PN satisfaction (GPNS score > 90). Using backward stepwise (conditional) regression method, of the seven socio-demographic characteristics examined (age >60 years, gender, European descent, English-speaking at home, private insurance, number of previous PN visits (>4), and paid employment), three variables emerged as significant predictors of high PN satisfaction. Adjusted odds ratio (AOR) showed that the older age group (AOR: 0.68, 95% CI: 0.54-0.86) and those of European descent (AOR: 0.59, 95% CI: 0.59-0.81) were less satisfied with the PN. Controlling for these factors, the logistic model showed that those who had more than 4 previous visits to the PN were 1.34 times more satisfied (AOR: 1.34, 95% CI: 1.06 to 1.70) with the PN. The Hosmer and Lemeshow goodness-of-fit was not significant ( $p=0.593$ ) indicating a good model fit (Table 2).

\*\*\*INSERT TABLE 2 HERE\*\*\*

## Discussion

As the first systematic attempt to evaluate consumer satisfaction with general practice nurses in New Zealand these data provide important insights. These findings are important for health professionals, policy makers and the community to ensure that these services meet the needs of those who they are intended to serve. These data identified that consumers were largely satisfied with practice nurse services. High levels of satisfaction with nursing care have been found previously in consumer satisfaction studies in both acute (Andrew, et al., 2011) and primary care settings (Halcomb, et al., 2011; Marshall, Floyd, & Forrest, 2001; Poulton, 1996; Williams & Calnan, 1991). This highlights the ceiling effect seen in the patient satisfaction literature (Andrew, et al., 2011) and demonstrates the need to further interrogate satisfaction data in order to better understand this complex phenomenon.

The survey achieved adequate item response rates and demonstrated good internal consistency (Cronbach's alpha 0.967), similar to that found when it was used in the Australian context (Cronbach's alpha 0.97)(Halcomb, et al., 2011). Given this we are confident that this instrument is a robust and appropriate measure of consumer satisfaction with general practice nursing.

Data from this study demonstrated that those consumers who had visited the PN more than four times previously were significantly more satisfied ( $p < 0.001$ ). This finding is in contrast to that of Halcomb et al. (2011) who did not find an association between number of practice nurse visits and patient satisfaction. However, it confirms the qualitative findings of Mahomed et al. (2012) who identified continuity of care as an important component of patient satisfaction. In their systematic review of continuity of primary care physicians and patient satisfaction, Adler et al. (2013) found that the association between continuity and levels of satisfaction was variable.

Such contradictory findings indicate that further investigation of the relationship between continuity of care and consumer satisfaction is required.

This study found that age, ethnicity and employment status were significant predictors of satisfaction levels. The literature provides limited consistency in the impact of demographic characteristics on patient satisfaction. For example; although age has been demonstrated to be a significant predictor of satisfaction (de Graaf-Ruizendaal, et al., 2013; Voogdt-Pruis, Gorgels, van Ree, van Hoef, & Beusmans, 2010; Williams & Calnan, 1991), the direction of this relationship has been variable, with older patients being more satisfied in some studies (Williams & Calnan, 1991). Further research is required to explore the differences in expectations and experiences of consumers with varying demographic to illuminate possible explanatory factors. The inconsistent evidence to date, however, highlights the need for individual practice nurses and consumers to discuss the consumer's expectations of services and create a shared understanding of treatment goals.

### **Limitations**

There were a number of limitations to this study. Firstly, the limitations of the self-report survey method are well recognised (Marsden & Wright, 2010). Consumer surveys in particular, are vulnerable to bias from social desirability. The literature clearly identifies that satisfaction with nursing care is often impacted by a ceiling effect (Andrew, et al., 2011). It is for this reason that qualitative data were collected following the survey administration. Due to the large volume of data collected, these interview data are reported separately (Halcomb, et al., 2013).

It was not possible to determine the precise consumer response rate in this survey due to the difficulty maintaining accurate records across practices regarding consumer refusal to participate. Additionally, it is not possible to determine how many



consumers received nursing services during the study period and were either intentionally or unintentionally not offered a survey form. Given the large sample size and the spread of demographics it would be reasonable to consider the sample as broadly representative of the types of patients commonly seen in general practice. It is unclear, however, why so many participants (44.5%) received an immunisation at the time of completing the survey. As data collection was undertaken over an extended period this is unlikely to be due to seasonal fluctuations in immunisation rates (e.g. influenza vaccination).

Accessibility of health professionals has been demonstrated to be strongly associated with satisfaction (Williams & Calnan, 1991). In this study, most participants reported that they were able to book an appointment with the practice nurse both quickly and at a suitable time. Given that the survey was undertaken with consumers who consulted the Practice Nurse it may be that those who were unable to make suitable appointments are underrepresented in the sample. Further research needs to explore satisfaction of the general community in order to capture the views of those who have more difficulty accessing general practice and practice nurses.

General practices are facing an increasing number of patient presentations and higher levels of acuity than they have seen previously. Chronic illness is characterised by alternating periods of exacerbation and wellness and requires close engagement between health professionals and consumers to develop mutually acceptable lifestyle modification and treatment plans (Halcomb, Davidson, Daly, Yallop, & Tofler, 2004). Such engagement relies on consumers being satisfied with the services that they are receiving and the health professionals providing those services (Donovan, 1995). These findings demonstrate the high levels of consumer satisfaction with practice nurses, but also highlight areas that require further

consideration. Such an insight is important for clinicians as they plan and implement nursing services in the general practice setting.

## **Conclusion**

These findings have implications for the design and delivery of nursing services in general practice. Our data suggest that the number of visits to the practice nurse significantly influence their satisfaction with nursing services. The influence of such characteristics upon satisfaction may indicate that consumer expectations need to be considered by the practice nurse and openly discussed to ensure that the practice nurse and consumer share common goals.

Future research should focus on the delivery of specific practice nurse interventions and explore that impact of various nurse-led interventions on consumer satisfaction and health outcomes. Such research should extend beyond randomised controlled trials of interventions and include examination of the process of care delivery and the interaction between consumers and practice nurses.

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**Table 1** Characteristics of participants

| <b>Variables</b>   |                            |
|--|----------------------------|
| Appointment made to see a Practice Nurse, <i>n</i> (%)   |                            |
| No   | 153 (10.2)                 |
| Yes  | 1235 (83.5)                |
| It was a possibility   | 93 (6.3)                   |
| Gender, <i>n</i> (%)   |                            |
| Female   | 968 (65.9)                 |
| Male   | 502 (34.1)                 |
| Age groups, <i>n</i> (%)   |                            |
| Up to 29 years   | 142 (10.0)                 |
| 30 to 44 years   | 265 (18.8)                 |
| 45 to 59 years   | 299 (21.2)                 |
| 60 to 69 years   | 270 (19.0)                 |
| 70 to 79 years   | 299 (21.2)                 |
| 80 years or more   | 138 (9.8)                  |
| Ethnicity, <i>n</i> (%)  |                            |
| European   | 1179 (83.6)                |
| Maori  | 129 (9.1)                  |
| Pacific Peoples  | 40 (2.8)                   |
| Asians   | 22 (1.6)                   |
| Middle Eastern/ Latin American/ African/ Other   | 41 (2.9)                   |
| Language spoken at home, <i>n</i> (%)  |                            |
| English  | 1345 (98.0)                |
| Other  | 27 (2.0)                   |
| Private Health Insurance, <i>n</i> (%)   |                            |
| Yes  | 421 (31.0)                 |
| No   | 938 (69.0)                 |
| Employment, <i>n</i> (%)   |                            |
| Paid work  | 636 (42.3)                 |
| Retired  | 517 (34.3)                 |
| Other (home duties, not in paid work, unemployed, etc)   | 352 (23.4)                 |
| Previous visits to see Practice Nurse, <i>n</i> (%)  |                            |
| Nil  | 96 (6.5)                   |
| 1 to 2   | 236 (15.9)                 |
| 3 to 4   | 296 (19.9)                 |
| 5 to 8   | 283 (19.1)                 |
| 9 to 12  | 132 (8.9)                  |
| More than 12   | 441 (29.7)                 |
| General Practice Nurse Satisfaction (GPNS) scale score, mean, ( <i>SD</i> ) (Range: 55 to 149) |                            |
|  | 82.5 ( 23.7)<br>Median: 90 |

**Table 2** Logistic regression<sup>a</sup> of patients' characteristics associated with high (> 96) General Practice Nurse Satisfaction score

| <b>Variable</b>                | <b>Coefficient<br/>(<i>B</i>)</b> | <b>Standard<br/>error<br/>(SE)</b> | <b>Adjusted odds<br/>ratio<br/>(95% CI)</b> | <b><i>P</i> value</b> |
|--------------------------------|-----------------------------------|------------------------------------|---|-----------------------|
| Age of patients: > 60 years    | -0.39                             | 0.12                               | 0.68 (0.54 to 0.86)                         | 0.001                 |
| Ethnicity: European            | -0.54                             | 0.17                               | 0.59 (0.42 to 0.81)                         | 0.001                 |
| Number of PN visits: > 4 times | 0.29                              | 0.12                               | 1.34 (1.06 to 1.70)                         | 0.016                 |

<sup>a</sup> backward stepwise conditional method

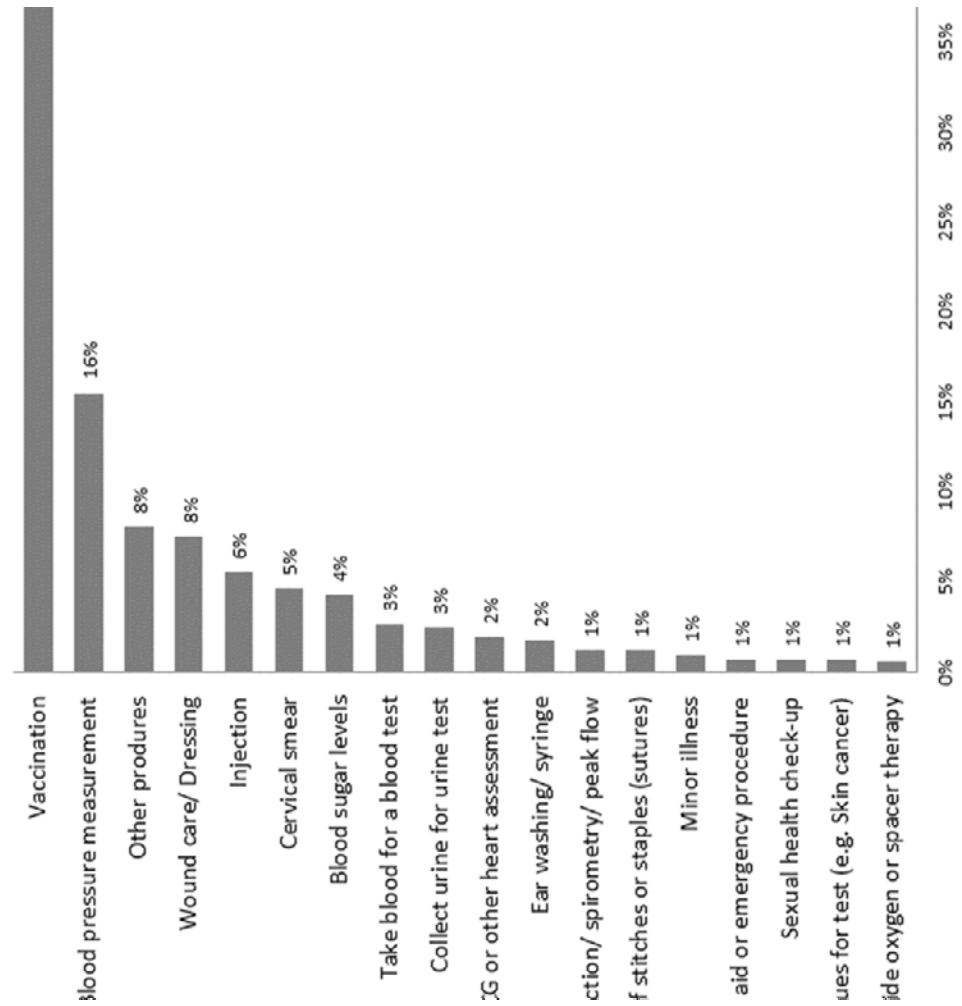
CI denotes confidence interval

Hosmer-Lemeshow goodness-of-fit for the model, chi-square = 3.70, 5 df (*P* = 0. 593)

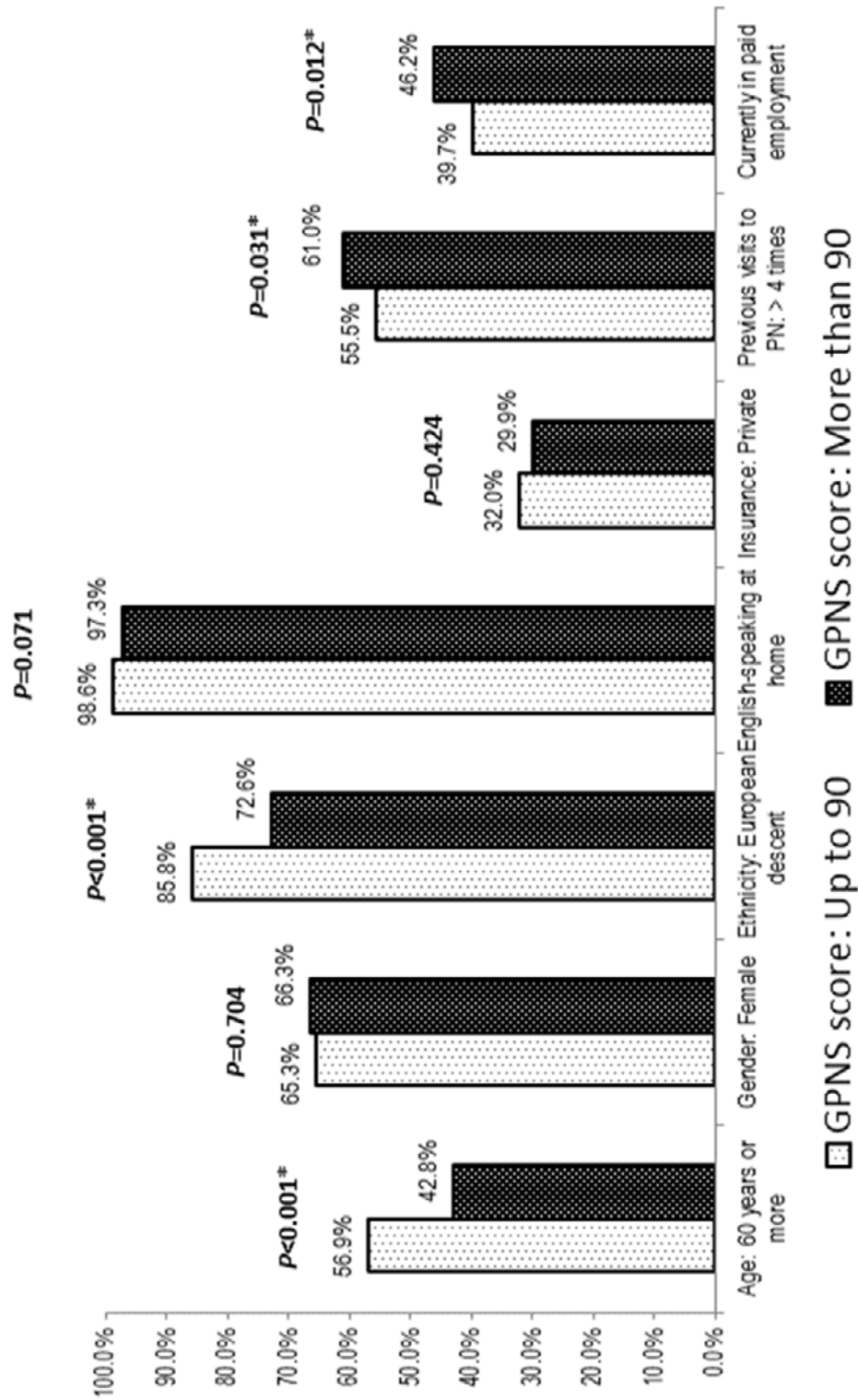
**Figure 1** GPNS Items

I feel confident in the PN  
I trust the PN  
I would recommend this PN to my family and friends  
I will follow the PN's advice  
The consultation with the PN  
The PN gave me useful advice  
The PN seemed to be up to date with health information  
I would be happy for a PN to perform this procedure again  
If the GP asked me, I would give positive feedback about the PN  
The PN was very thorough  
The PN and GP worked well as a team  
The PN spent enough time with me  
The PN was confident in my ability to look after my health  
The PN was caring and concerned about me  
The PN was friendly and warm  
The PN respected me  
The PN was patient with my questions or worries  
The PN paid attention to what I had to say  
The PN encouraged me to ask questions  
The PN explained everything clearly  
The PN helped me understand what the GP said





**Figure 2** Procedure performed by Practice Nurse during the current visit



**Figure 3** Group comparisons of GPNS scores by patients' characteristics