

Would they dope? Revisiting the Goldman dilemma

James Connor,¹ Jules Woolf,² Jason Mazanov¹

¹School of Business, University of New South Wales, Canberra, Australian Capital Territory, Australia

²Department of Kinesiology, University of Windsor, Ontario, Canada

Correspondence to

Dr James Connor,
School of Business, University of New South Wales,
Canberra, Northcott Drive,
Canberra, ACT 2600, Australia;
James.Connor@adfa.edu.au

Received 25 September 2012

Revised 18 December 2012

Accepted 21 December 2012

ABSTRACT

Background/aim Discussions of doping often report Goldman's sensational results that half of the elite athletes asked would take a drug that guaranteed sporting success which would also result in their death in 5 years' time. There has never been any effort to assess the properties of the 'Goldman dilemma' or replicate the results in the post World Anti-Doping Agency context. This research evaluated the dilemma with contemporary elite athletes.

Methods Participants at an elite-level track and field meet in North America were segregated into an interview or online response. After basic demographics, participants were presented with three variant 'Goldman' dilemmas counter-balanced for presentation order.

Results Only 2 out of 212 samples (119 men, 93 women, mean age 20.89) reported that they would take the Faustian bargain offered by the original Goldman dilemma. However, if there were no consequences to the (illegal) drug use, then 25/212 indicated that they would take the substance (no death condition). Legality also changes the acceptance rate to 13/212 even with death as a consequence. Regression modelling showed that no other variable was significant (gender, competitive level, type of sport) and there was no statistical difference between the interview and online collection method.

Conclusions Goldman's results do not match our sample. A subset of athletes is willing to dope and another subset is willing to sacrifice their life to achieve success, although to a much lesser degree than that observed by Goldman. A larger scale online survey is now viable to answer important questions such as variation across sports.

INTRODUCTION

The 'Goldman dilemma'¹ is one of the most cited results in the antidoping literature, becoming accepted 'wisdom' regarding the choices elite athletes make regarding drug use in sport. The dilemma presents a Faustian bargain to athletes, asking if they would trade longevity for Olympic success by taking a drug that not only guaranteed a Gold Medal but also their death in 5 years' time. Goldman is reported to have presented this dilemma to world-class athletes biannually between 1982 and 1995. He reported a remarkably stable set of results with about half accepting the gold for death deal.² There has been little in the way of replication of the Goldman dilemma since 1995, with sporadic adaptations for different contexts showing athletes of various levels to be less likely to take the bargain.³ Despite the extensive reporting of Goldman's results and the adaptations, questions remain around the validity and reliability of the dilemma to accurately capture an athlete's willingness to trade longevity for Olympic success.⁴ This paper begins an exercise to test the properties of

the Goldman dilemma in preparation for a large-scale replication among contemporary elite athletes.

The first weakness of Goldman's work is that no comparable measure of acceptance exists among the general population. That is, there are no data to suggest whether the athletes are responding in the same manner or differently to members of the general population. Contemporary data suggest that the general population take a very conservative approach to the dilemma; out of a representative sample of n=250 Australians, only two respondents accepted the bargain.⁴ These data provide an indicator against which comparisons can be made. That is, if athletes respond to the dilemma in the same way as the general population, approximately 1% of athletes would take the Faustian bargain.

The second weakness in Goldman's work is found in the wording of the questions. The question presented the outcome (Olympic gold) followed by the consequence (death). As Connor and Mazanov⁴ assert, 'Goldman dilemma responses may represent a positive response bias as a function of wording, necessitating replication using the counterbalanced presentation' (p. 872). The current project tested whether the counterbalanced presentation identified effects in terms of substance legality (legal vs illegal), mortality (death vs non-death) and order of presentation effects (outcome vs consequences).

The third potential weakness in Goldman's work is the use of the question method.¹ Goldman's initial study saw athletes verbally answer the question while in attendance at events or training. However, there is little discussion from Goldman on the method of recruitment or how representative his samples were, and to our knowledge the studies have not been peer-reviewed. The biases associated with this method are well known in terms of interviewer effects (eg, confirmation bias), respondent effects (eg, faking good or bad) and setting effects (eg, other people may overhear responses).³ The sensitivity of the question must also be accounted for as admission of willingness to use drugs may change with the method.^{6 7} Paper-and-pencil methods were traditionally used to overcome question sensitivity, which has now been translated to online surveys.⁸ The current project, therefore, assesses whether any disparities in responses emerge across method, comparing interviews with online responses.

The fourth weakness in the original Goldman studies assessed in this project is generalisability over time across social contexts. The social context in which Goldman polled athletes took into account political considerations around sport arising from the Cold War and a weak policy on drugs in sport that was variably enforced, if at all.⁹ In contrast, the contemporary context is dominated by the implementation and enforcement of a strong

To cite: Connor J, Woolf J, Mazanov J. *Br J Sports Med* Published Online First: [please include Day Month Year] doi:10.1136/bjsports-2012-091826

legalistic prohibitionist drug policy in sport (antidoping) with high levels of awareness of the consequences of an antidoping rule violation.¹⁰ The change in policy context has seen a shift towards zero tolerance for performance-enhancing drug in sport across cultural contexts^{11 12} while there has been an increasing normalisation of performance-enhancing drug use in the society.^{13 14} The changes in the social context may mean that the results from the original Goldman studies fail to generalise to the contemporary context.

Beyond the pragmatic considerations around the properties of the Goldman dilemma, understanding athlete attitudes and behaviours towards doping is seen as essential to managing performance-enhancing drug use in sport.¹⁵ There is a growing literature on the social circumstance of sport and the drivers of behaviours defined as 'illegal', which indicates that athletes, to reach the elite level, must display a singular focus and desire often to the exclusion of other life-affirming activity.¹⁶ Further, the intense desire to win, fuelled by this commitment, may make it more likely that they would accept such a bargain. It is clear that some athletes will accept such a deal without the guarantee of success, as shown by those who are caught doping. The current study provides data on the proportion of athletes willing to accept the Faustian bargain offered by misuse and abuse of performance-enhancing drugs.

The purpose of this research is to test Goldman's dilemma on a sample of North American elite athletes. Owing to changes in the social context, a smaller percentage of contemporary athletes are expected to accept the bargain compared with athletes in the pre antidoping era and higher than the general population benchmark set by the Australians. No differences are expected across the counterbalanced questions or administration method.

METHOD

Two hundred and twelve elite athletes aged 18 or above ($M=20.89$, $SD=2.51$) competing at an annual track and field invitational in Canada were recruited to participate in the study (University of Windsor ethics approval number: 11-264). 'Elite' was defined as having participated in sport at the State (USA) or Provincial (Canada) level. Participants indicated their highest level of competition as international (20.3%), national championship (57.3%), State or Provincial championship (13.7%) or State or Provincial competition (8.5%). There were 119 male (56.1%) and 93 female (43.9%) participants.

A research associate solicited athletes after an event (by chance) near the track and invited them to participate in exchange for a sealed bottle of *Gatorade*. A walled area was set up. Participants were informed of the ethics of the experiment and asked for consent, then randomly assigned into one of two conditions, both in private screened off areas. In the first condition, participants were asked survey questions by a trained interviewer, replicating the procedure used by Goldman. The second condition was an anonymous online survey (utilising Fluidsurveys) in a secluded area with a laptop. The questions were identical across administration conditions. The instructions were scripted.

The questionnaire included qualifier questions (age above 18 years and level of competitive experience). Participants were asked to indicate their nationality, gender, type of sport (power or endurance), a single item on the importance of sporting success in their country (very, moderately, not at all) and the counterbalanced variations of the dilemma. The five questions used were:

1. Illegal–medal–death: Would you take an undetectable, illegal performance-enhancing substance that guaranteed

you would win an Olympic Gold Medal, but would kill you in 5 years?

2. Illegal–death–medal: Would you take an undetectable, illegal performance-enhancing substance that would kill you in 5 years, but guaranteed you would win an Olympic Gold Medal?
3. Legal–medal–death: Would you take a legal performance-enhancing substance that guaranteed you would win an Olympic Gold Medal, but would kill you in 5 years?
4. Legal–death–medal: Would you take a legal performance-enhancing substance that would kill you in 5 years, but guaranteed you would win an Olympic Gold Medal?
5. Illegal–medal–no death: Would you take an undetectable, illegal performance-enhancing substance that guaranteed you would win an Olympic Gold Medal?

The counterbalanced version of the fifth question ('illegal–no death–medal') was redundant. There was also no point asking a question about 'legal–medal–no death' as this is demonstrated by athletes who consume legal performance-enhancing substances.¹⁷

Question order effects were controlled with 12 versions of the questionnaire. The response format followed the 'yes' or 'no' approach of the original Goldman studies. Noting that criticism dichotomous choices may obscure important variation in the data, there is evidence that athlete answers to questions about performance-enhancing drug use other than a definite rejection indicate vulnerability to use.¹⁸ That is, non-dichotomous response formats to doping questions are usually recoded as dichotomous variables.

RESULTS

Table 1 summarises participant responses to the five questions. Like the Australian general population data, only two 'yes' responses (0.9%; 95% CI 0.0% to 2.2%) emerged from the original version of the dilemma. If the drug was legal and mortality consequences remained, 6.1% (95% CI 2.9% to 9.4%) were willing to accept the dilemma. Finally, approximately 11.8% (95% CI 7.5% to 16.1%) were willing to accept the dilemma if it were illegal with no indication of mortality effects. It bears noting that no participant who accepted the dilemma when it is legal but has consequences was willing to accept the dilemma when it is illegal but does not have any consequences. Inspection of the 95% CIs indicates that athletes matched the general population response, which was significantly less than the results reported by Goldman.

A logistic regression analysis predicting acceptance of the dilemma was used to assess the methodological hypotheses. The independent variables were consequences (death vs non-death), legality (legal vs illegal), gender, level of competition, type of sport, method of data collection (online vs interview) and presentation order (eg, medal first, death second or *vice versa*). Each response was entered into the equation.

The full model was statistically significant against the constant only model, indicating that the predictors reliably distinguished between acceptors and decliners of the offer ($\chi^2=30.61$, $df=10$, $p<0.001$) with acceptable model fit (Homser and Lemeshow $\chi^2=12.43$, $df=8$, $p<0.134$). A modest relationship was found between prediction and grouping (Nagelkerke's $R^2=0.13$; a pseudo R^2 as logistic regression has no R^2 equivalent).

Results from the logistic regression are summarised in table 2. The Wald criterion indicates that responses were differentiated on the basis of consequences and legality. When consequences are more severe (ie, result in death), then participants are 0.07 times more likely to accept the dilemma. Similarly, when the substance is identified as illegal, participants are 0.14 times

Table 1 Participants' responses to variations of the Goldman dilemma

Condition	Question	Respondents (n)	Acceptance (n)	Percentage	Cumulative percentage
Illegal and death	Would you take an undetectable, illegal performance-enhancing substance that guaranteed you would win an Olympic Gold Medal, but would kill you in 5 years?	109	2	1.83	0.94
	Would you take an undetectable, illegal performance-enhancing substance that would kill you in 5 years, but guaranteed you would win an Olympic Gold Medal?	103	0	0	
Legal and Death	Would you take a legal performance-enhancing substance that guaranteed you would win an Olympic Gold Medal, but would kill you in 5 years?	109	6	5.50	6.13
	Would you take a legal performance-enhancing substance that would kill you in 5 years, but guaranteed you would win an Olympic Gold Medal?	103	7	6.80	
Illegal and no consequences	Would you take an undetectable, illegal performance-enhancing substance that guaranteed you would win an Olympic Gold Medal?	212	25	11.79	11.79

more likely to accept the dilemma. No change in the odds of accepting the dilemma emerged for the data collection method or question order.

DISCUSSION

The results show that the proportion of athletes willing to take the Faustian bargain offered by the Goldman dilemma has changed significantly, approximating the proportion observed in the only sample of general population responses.⁴ This indicates that responses to the dilemma from 1982 to 1995 should no longer be taken to reflect the approach taken to the use of drugs in sport by contemporary athletes. The counterbalancing of question design had no effect on acceptance of the bargain, and neither did the response format. Future research on the dilemma can use any version of the wording in an online survey. Athletes were sensitive to the consequences of performance-enhancing drug use (death vs non-death) and the legality of substances. This was consistent with other work showing that athletes are sensitive to the health and legal implications of using performance-enhancing drugs.¹⁹

The radical change in proportion of athletes willing to accept the dilemma is explained in two ways, although others are equally plausible alternative explanations. The problem with defining an explanation in this context lies in the significant

changes in the social and sportive contexts. Attempting to explain them fully is to attempt to describe the evolution of drugs in sport since 1982.

The first explanation flows from the significant impact of the consequences and legality on acceptance. The social context of the original Goldman results may have had a very different understanding of the consequences of using performance-enhancing drugs. There is also the possibility that the subset of athletes (power-sports) that Goldman approached is not representative. Doping knowledge was usually obtained informally via word-of-mouth or underground handbooks⁹ rather than medical advice, and was often erroneous. As a result, the consequences of doping were uncertain. Unsupervised experimentation with erythropoietin among endurance athletes revealed the danger of misuse and abuse.²⁰ In terms of legality, the epoch around the original Goldman results was one of uncertainty arising from imprecise testing technology. Changes in testing technology and techniques (eg, legal tests of sample collection) have improved this significantly. The result of these changes is sensitivity to both consequences and legality;¹⁹ contemporary athletes are more aware not only of the consequences of drug misuse and abuse, but also of the legal status of drug use than they were in the original Goldman results. This may have driven the change over time.

Table 2 Summary of logistic regression analysis

Variable	B (SE)	Wald	exp b	95% CI
Constant	0.20 (0.98)	0.04	1.22	
Consequences	-2.66* (0.74)	12.83	0.07	0.02 to 0.30
Legality	-1.94** (0.77)	6.36	0.14	0.03 to 0.65
Competitive level†		4.24		
International	-0.51 (0.58)	0.79	0.60	0.19 to 1.86
National championship	-1.02 (0.53)	3.72	0.36	0.13 to 1.02
State/Provincial championship	-0.64 (0.64)	1.01	0.53	0.15 to 1.84
Type of sport‡		1.73		
Ball	0.48 (0.70)	0.43	1.58	0.40 to 6.21
Power	0.47 (0.36)	1.65	1.60	0.78 to 3.26
Data collection method	0.21 (0.34)	0.38	1.24	0.63 to 2.43
Question order	-0.10 (0.34)	0.09	0.90	0.46 to 1.76
Gender	0.24 (0.35)	0.45	1.27	0.64 to 2.53

*p<0.001.

**p<0.05.

†Comparator state/provincial competition.

‡Comparator endurance sport.

The second explanation flows from the social marketing of antidoping.²¹ The original studies were conducted during the debate around the role of drugs in sport, which led to the current legalistic prohibitionist model. The moral stance on the role of drugs in sport was being thrashed out and was therefore ambiguous. Contemporary athletes now contend with an ethically unambiguous (although arguably morally ambiguous) statement that 'doping is fundamentally contrary to the spirit of sport'.²² The result of this stance has been a consolidation of discourses which criminalise doping,²³ evidenced by attitudes trending towards increasingly aggressive responses to doping in sport,^{11 12} in contrast to the more liberal approach to performance enhancement (eg, cognitive enhancement or cosmetic surgery)^{13 14} and other drug use across the society.²⁴ Therefore, the second plausible explanation for the results is that doping in sport has been stigmatised to the point that it is seen as deviant behaviour. As a result, athletes are at least less willing to admit they would consider use. Given the gap between intention and behaviour,²⁵ it is unclear the extent to which this reflects actual behaviour.

Sociological factors such as those articulated above provide the background to contemporary responses to the Goldman dilemma. In this context, the majority of athletes reject the dilemma. Importantly, there are still athletes who report a willingness to trade longevity for Olympic success (regardless of legality) and a willingness to use illegal performance-enhancing drugs (with no mortality implications). These athletes have perhaps failed to internalise the ethical dogma of the antidoping policy that the 'taking part' of sport (identified by the 11 values in the Spirit of Sport statement)²² is more important than the 'winning' or perhaps made a conscious decision not to do so. Yet the importance of winning in contemporary sport is undeniable,²⁶ as is the desire to win an essential part of elite athlete psychology and an essential part of sports participation in general. The combining of sociological and psychological factors to explain athlete doping has been the subject of significant theoretical and empirical work,^{27–30} suggesting that there will always be a core of athletes willing to dope regardless of consequences (mortality, sanctions or otherwise). The results of this study, along with ongoing antidoping rule violations for doping use, demonstrate that this core is likely to remain.

The evaluation of the question strategy underlying the Goldman dilemma yields two key results. The first is that the order of presentation is irrelevant to whether an athlete responds positively or negatively. The second is equivalence of response across modes of delivery. This sets the stage for large-scale online surveying. It is worth noting that the non-significance of method suggests equivalence and that the hypothetical nature of the dilemma may be less sensitive than probing other drug-use behaviour. Further testing is needed to determine whether the responses to the dilemma can predict subsequent doping, making it part of the cluster of measures used to infer behaviour in doping research.³¹

The next step in this research programme is to establish a large-scale online survey. This overcomes the limitation to generalisability associated with the sample of track and field athletes at the championship meet in Canada. A broader cross-section of sports is needed to determine whether the results for track and field generalise to other sporting contexts and cultures. Finally, a comparable sample of the general population is needed to determine whether athlete responses accord with those from a similar culture.

The current study shows that the results collected in 1982–1995 no longer have relevance in the contemporary context. The 'wisdom' that athletes are willing to die to win applies to

What are the new findings?

- ▶ The Goldman dilemma of trading longevity for success is not currently accepted by elite athletes (1% acceptance in comparison to ~50%).
- ▶ A significant subset of athletes will dope if there are no health consequences or if doping is legal in sport.
- ▶ Responses to the dilemma were unaffected by word order presentation or mode of question via interviewer or online.

How might it impact on clinical practice in the near future?

- ▶ Clinicians need to be aware that a group of elite athletes prioritise winning over health and legality.
- ▶ A different approach to at-risk athletes that does not rely on ethics or health needs to be developed.
- ▶ The Goldman results are no longer a valid indicator of the prevalence of doping and should be ignored.

only a handful of athletes. Put simply, the sensational reporting of the 1982 to 1995 responses to the Goldman dilemma is no longer relevant to the contemporary debate around the role of drugs in sport.

Acknowledgements The authors thank the athletes, who so generously gave their time to participate, and the organisers of the meeting who facilitated the research.

Contributors All authors contributed equally and qualify for authorship based on ICMJE guidelines.

Funding This research was supported by the World Anti-Doping Agency (WADA) via their social science research programme for the project: 'Death for Performance—What would athletes trade-off for success?', funded in 2011.

Competing interests None.

Ethics approval University of Windsor ethics approval number: 11-264.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Goldman B, Bush PJ, Klatz R. *Death in the locker room*. London: Century, 1984:32.
- 2 Bamberger M, Yaeger D. Over the edge. *Sports Illustrated*, 14 April 1997.
- 3 Bloodworth AJ, Petroczi A, Bailey R, et al. Doping and supplementation: the attitudes of talented young athletes. *Scand J Med Sci Sports* 2012;22:293–301.
- 4 Connor JM, Mazanov J. 'Would you dope? A general population test of the Goldman dilemma'. *Br J Sports Med* 2009;43:871–2.
- 5 Choi BCK, Pak AWP. A catalog of biases in questionnaires. *Prev Chronic Dis* 2005;2:1–13.
- 6 Tourangeau R, Yan T. Sensitive questions in surveys. *Psychol Bull* 2007;133:859–83.
- 7 Fowler FJ. *Survey research methods*. Thousand Oaks, CA: Sage, 2009:74–7.
- 8 de Leeuw ED. To mix or not to mix data collection modes in surveys. *J Off Stat* 2005;21:233–55.
- 9 Voy R. *Drugs, sport and politics*. Champaign, IL: Leisure Press, 1991.
- 10 Mazanov J, Petróczi A, Bingham J, et al. Towards an empirical model of performance enhancing supplement use: a pilot study among high performance UK athletes. *J Sci Med Sport* 2008;11:185–90.
- 11 Stamm H, Lamprecht M, Kamber M, et al. The public perception of doping in sport in Switzerland, 1995–2004. *J Sports Sci* 2008;26:235–42.
- 12 Hanstad DV, Loland S. Elite athletes' duty to provide information on their whereabouts: Justifiable anti-doping work or an indefensible surveillance regime? *Eur J Sports Sci* 2009;9:3–10.
- 13 Møldrup C, Traulsen JM, Almasdottir AB. Medically enhanced normality: an alternative prescription on the use of medicines for non-medical purposes. *Int J Pharm Pract* 2003;11:243–9.

- 14 Møldrup C, Hansen RR. Public acceptance of drug use for non-disease conditions. *Curr Med Res Opin* 2006;22:775–80.
- 15 Backhouse S, McKenna J, Robinson S, et al. *Attitudes, behaviours, knowledge and education—drugs in sport: past, present and future*. Montreal, Canada: World Anti-Doping Agency, 2007.
- 16 Finley P, Finley L. *The sports industry's war on athletes*. Westport: Praeger, 2006.
- 17 Corrigan B, Kazlauskas R. Medication use in athletes selected for doping control at the Sydney Olympics (2000). *Clin J Sport Med* 2003;13:33–40.
- 18 Gucciardi DF, Jalleh G, Donovan R. Does social desirability influence the relationship between doping attitudes and doping susceptibility in athletes? *Psychol Sport Exerc* 2010;11:479–86.
- 19 Huybers T, Mazanov J. What would Kim do: a choice study of projected athlete doping considerations. *J Sport Manag* 2012;26:322–34.
- 20 Parisotto R. *Bloodsports*. Melbourne, Australia: Hardie Grant Books, 2006.
- 21 O'Reilly N, Madill J. The World Anti-Doping Agency: the role of social marketing. *J Non-Profit Public Sector Mark* 2007;17:1–26.
- 22 WADA. *World anti-doping code*. Montreal, Canada: World Anti-Doping Agency, 1999:2009.
- 23 Hoberman J. 'Athletes in handcuffs?' The criminalisation of doping. In: McNamee M, Moller V, eds. *Doping and anti-doping policy in sport*. Oxon, UK: Routledge, 2011:99–110.
- 24 Erikson PG, Hathaway AD. Normalization and harm reduction: research avenues and policy agendas. *Int J Drug Policy* 2010;21:137–9.
- 25 Sheeran P. Intention-behaviour relations: a conceptual and empirical review. In: Hewstone M, Stroebe W, eds. *European review of social psychology*. Vol. 12, Chichester, UK: John Wiley & Sons, 2002:1–36.
- 26 Connor JM. The athlete as widget: how exploitation explains elite sport. *Sport Soc* 2009;12:1369–77.
- 27 Donovan RJ, Egger G, Kapernick V, et al. A conceptual framework for achieving performance enhancing drug compliance in sport. *Sports Med* 2002;32:269–84.
- 28 Mazanov J, Huybers T. An empirical model of athlete decisions to use performance enhancing drugs: qualitative evidence. *Qual Res Sport Exerc* 2010;2:385–402.
- 29 Petroczi A, Aidman E. Psychological drivers of doping: the life-cycle model of performance enhancement. *Subst Abuse Treat Prev Policy* 2008;3:7.
- 30 Stewart B, Smith ACT. Drug use in sport: implications for public policy. *J Sport Soc Issues* 2008;32:278–98.
- 31 Uvascek M, Nepusz T, Mazanov J, et al. Self-admitted behaviour and perceived use of performance enhancing versus psychoactive drugs among competitive athletes. *Scand J Med Sci Sports* 2011;21:224–34.



Would they dope? Revisiting the Goldman dilemma

James Connor, Jules Woolf and Jason Mazanov

Br J Sports Med published online January 23, 2013

doi: 10.1136/bjsports-2012-091826

Updated information and services can be found at:

<http://bjsm.bmj.com/content/early/2013/01/22/bjsports-2012-091826.full.html>

These include:

- | | |
|-------------------------------|--|
| References | This article cites 22 articles, 1 of which can be accessed free at:
http://bjsm.bmj.com/content/early/2013/01/22/bjsports-2012-091826.full.html#ref-list-1 |
| P<P | Published online January 23, 2013 in advance of the print journal. |
| Email alerting service | Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article. |

Notes

Advance online articles have been peer reviewed, accepted for publication, edited and typeset, but have not yet appeared in the paper journal. Advance online articles are citable and establish publication priority; they are indexed by PubMed from initial publication. Citations to Advance online articles must include the digital object identifier (DOIs) and date of initial publication.

To request permissions go to:

<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:

<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:

<http://group.bmj.com/subscribe/>